



The IRMA Data Store Help Manual

<http://IRMA.nps.gov>

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1 Welcome and Introduction

Welcome. The Data Store is for describing, managing and sharing all types of information pertinent to resource management within the National Park Service. Information can include, although is certainly not limited to:

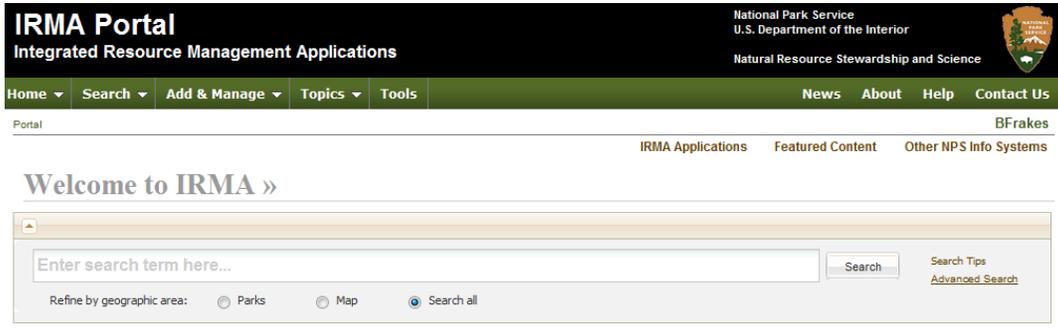
- Published and unpublished reports
- Geospatial and tabular datasets
- Field manuals and other general resource materials
- Photographs, maps, letters, etc.
- Digital files

The Data Store is open to all NPS staff to both search for and post new information.

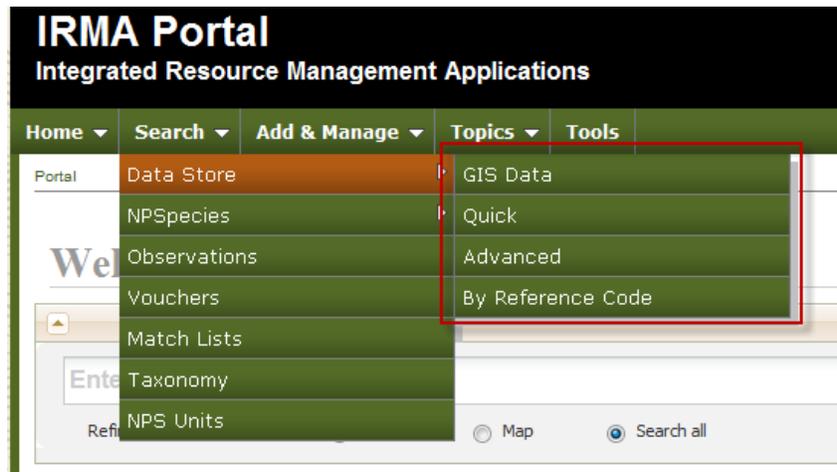
This document is the comprehensive guide to all of the functionality for the IRMA Data Store. It will be regularly updated as new functionality is added.

2 Search Interface

You have a couple of search options for finding information within the Data Store. These options include the Portal Search (not recommended at the present time)



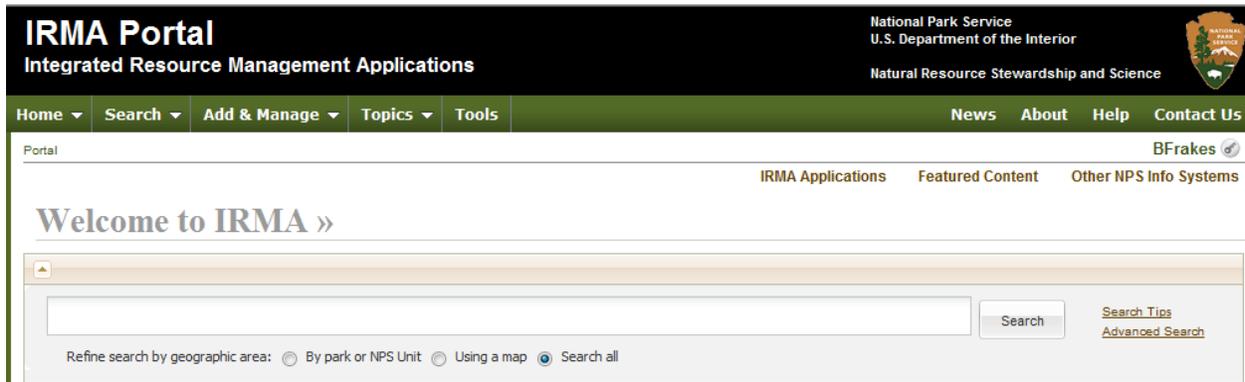
as well as four options specific to the Data Store: GIS Data, Quick, Advanced and By Reference Code.



2.1 Portal Search

The home page of the IRMA Portal automatically searches the Data Store, although the search functionality is limited to three criteria:

- Text Phrase - By typing in a text phrase, the Portal will search the Data Store for any Reference containing the phrase in the Display Citation, Keywords, Content Description, Author Last Name, Corporate Name, and Abstract.
- Unit Code – You can select one or more unit codes that will return all References linked to at least one of the Units
- Geographic Area – You can define a geographic area that returns all References that have an intersecting geographic footprint.



Currently, the Portal Search is so limiting that your best bet is to search specifically within the Data Store. Longer term, the Portal Search will be more robust although because it will search more applications than just the Data Store, search options will always be limited.

2.2 Searching Within the Data Store

Specifically within the Data Store, you have four options for searching:

- **Quick Search**— Conduct a simple broad search by information groups (e.g., documents, datasets, etc.), word phrase (e.g., “moose”), and/or NPS Unit.
- **Advanced Search** – Develop a detailed and customized query to find exactly what you need.
- **Reference Code**— Search by an existing Reference Code.
- **GIS Data** – Run an advanced search that is pre-filtered for returning only geospatial data

2.2.1 Search Type: Quick

This search is geared to someone wishing to quickly conduct a general search for all types of information, most often specific to a park unit.

Data Store Search

To streamline this search, some search criteria are pre-defined:

- **Fields** - Fields that are automatically searched include the Display Citation, Keywords, Content Description, Author Last Name, Corporate Name, and Abstract. By searching these fields, we automatically capture most of the important fields that will likely produce the most robust results. Title and Reference Code are not included in this search since they are already handled by searching the Display Citation.

- Reference Visibility—Only Public and Internal References are returned with a Quick Search (i.e., References that are Active, Legacy and InReview).

See Also

Holding Location Types and Attributes (Section 7.2),
Reference-Unit Links (Section 8),
Information Resource Evaluation (Section 6.2)
Reference Lifecycle States (Section 6).

Reference Type Group

The Data Store allows users to be very specific on the types of information they catalog (e.g., published report, journal article, vector dataset). However, most users do not know, or even care, about the subtle differences between the types of information (e.g., journal article vs. published report). Therefore, we offer the ability to search for categories of information:

- Documents –All synthesized and written information, including reports, journal articles, books, book chapters, notes, etc.
- Datasets – All types of tabular and spatial data
- Geospatial Datasets – All types of natively geospatial data (e.g., geodatabases, vector data, satellite images, etc.)
- Multimedia – All photos, audio, and other types of non-traditional media (e.g., movies).
- Projects – All projects

If you Select ALL, you will not filter your search by the type of information.

If you wish to search for specific types of information (e.g., you want to search specifically for unpublished reports), you will need to use the Advanced Search (Section 2.2.2).

See Also

Reference Type Definitions (Section 5.4)
Reference Type Groups (Section 7.2)
Links Among References (Section 5.9)
Reference-Unit Links (Section 8)

Search Text

This helps narrow the search by a word phrase or phrase. All text entered is treated literally¹. Therefore, the phrase 'elk habitat' will be searched as 'elk habitat' and not 'elk' AND 'habitat'.

Unit(s)

NOTE : You will only search for the units listed in the right panel

Searching by Unit will return all Reference linked to the Unit. Currently, all References will be returned that have a Legacy, Pending, or Approved unit link; those that have a Denied Reference-Unit link will not be returned on a search.

If you check the 'Include Linked Units' option, you will get one of the following:

- For Network, you will get all of the related parks.
- For Region, you will get all of the related parks.
- For Park, you will get any affiliated areas with Unit Codes, if they exist. For example, Rocky Mountain National Park (ROMO) has Cache La Poudre Water Heritage Area (CALA).
- For Office, there are no linked Units, so no additional Units will be added to the selection.

¹ Ultimately, we will be more intelligent with this and not treat text so literally.

When you specify more than one unit, you will get all References linked to at least one of the Units (aka Union).

See Also

Reference Unit Links (Section 8)

2.2.2 Search Type: Advanced

The advanced search provides incredible flexibility in how you search and is intended to narrow your results to just a few References meeting your specific search criteria. Currently, there are eleven ways you can narrow your search results, each of which has its own section. Additionally, at any time you can save your search criteria for later use or to share with others.

The screenshot displays the 'Search Definition' window. At the top, 'Search Type' is set to 'Advanced'. On the right, '# References per Page' is set to 50. Below this is a 'Saved Searches' section with a dropdown menu labeled 'Select a search...' and a 'Save Current Selections' button. The main area contains eleven search criteria sections, each with a dropdown arrow and an 'Exclude' checkbox:

- Reference Type Groups
- Search Fields
- Units
- Map
- Reference-Unit Lifecycles
- Reference Types and Specific Fields
- Online Resources
- Reference Visibility
- Holding Locations
- Reference Lifecycles
- Collections

At the bottom right, there are 'Clear Search' and 'Search' buttons.

Other notes:

- All sections where search criteria are defined are intersected together.
- You must specify a criterion in at least one of the sections to run a search
- You can exclude a section at any time by checking the exclude option. This allows you to keep your search criteria within a section but not use them for a specific search.
- Only Public and Internal References are returned with this search. See the top of Section 2 for more information
- We have only tested this search interface for 10 criteria per section, thus, if you add 5000 search criteria we cannot guarantee that you will get meaningful results within a reasonable time period.

Saved Searches

You can limit your search to any saved search you have created. When selecting a saved search, other search criteria fields will automatically be populated.

Saved Searches: Save Current Selections

Clear Search Search

See Also

- Creating Searches(Section 2.5)
- Managing Saved Searches (Section 4.3)

Reference Type Groups

Reference Type Groups are already described in the Quick Search (See Section 2.2.1).

Search Fields

The first section is devoted to searching for a text string using the fields that are both frequently searched and common to all Reference Types.

Search Fields

- Display Citation (selected)
- Abstract or Full Description
- Brief Description
- Display Citation
- Title
- Units**
 - Date of Issue/Publication
 - Content Begin Date
- Refer**
 - Content End Date
 - Last Edited
- Map**
 - Owner
 - Viewer
- Refer**
 - Keyword
 - Contact Name
- Online**
 - Any Common Text Field

containing

You can add as many filters as you want and can also specify whether they are intersected or unioned (i.e., AND, OR, AND NOT).

Common Fields

Display Citation containing elk habitat Remove

AND Contact Name containing tucker Remove

Add Filter

You can also remove any of the filters at any time.

A few other notes regarding this search:

- Currently, you must know the Active Directory name to search by Reference Owner/Viewer
- Contacts refers to any contact type, including author, editor, publisher, etc. If you wish to be more specific about the contact type, you will need to use the “Reference Types and Specific Fields” section.

See Also

Advanced Search Logic(Section 17)
Reference Attribute Definitions (Section 6.3)

Units

The advanced search provides flexibility in how you filter by a NPS unit (e.g., park, region, network, office, etc.). You have the option of specifying one or more units, can union or intersect them, and may include linked units (i.e., Include all parks for a given network or include all parks for a given region).*

The screenshot shows a search filter interface titled "Units". At the top right, there is an "Exclude" checkbox. Below this, there are two filter entries. The first entry is "Rocky Mountain National Park (ROMO)" with a dropdown menu to its left and a checkbox labeled "Include linked Units" to its right, followed by a "Remove" button. The second entry is "Geologic Resources Inventory (GRI)" with a dropdown menu to its left and a checkbox labeled "Include linked Units" to its right, followed by a "Remove" button. Between the two entries, there is a dropdown menu showing "AND". At the bottom left of the filter area, there is an "Add Filter" button.

See Also

Reference Unit Links(Section 8)

Map

A map is provided so you can search for all References that intersect geographically the bounding area of the Reference. If a bounding box for an NPS Unit is used, the returned results may not always be for information specific to the Unit. For example, if the search included the bounding area for Rocky Mountain National Park (ROMO), results would include References specifically about ROMO and may also include others that overlap ROMO (e.g. a book titled 'Birds of Colorado').

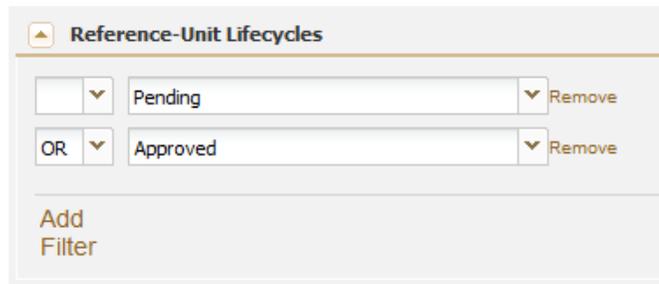


See Also

Reference Geospatial Attributes (Section 6.8)
 Units and Geographical Tab (Section 3.5.3)

Reference-Unit Lifecycles

This section allows you to search by the Reference-Unit lifecycle.

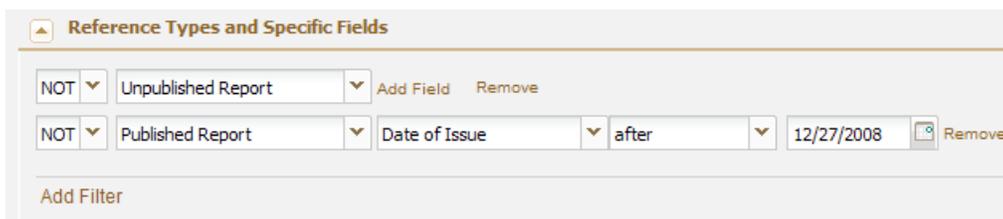


See Also

Reference-Unit Links (Section 8)

Reference Types and Specific Fields

This section allows you to search by specific Reference Types and their associated attributes.



You have the option of specifying only the Reference Type (e.g., IS Published Report or IS NOT Published Report). You can also specify specific fields for the Reference Type.

See Also

Advanced Search Logic (Section 17)
 Reference Type Definitions (Section 6.4)
 Reference Attribute Definitions (Section 6.3)
 Attributes for Each Reference Type (Section 6.5)

Online Resources

In some cases, you may only be interested in getting search results for those Reference where you can actually download a file. Therefore, we offer the option to limit the search results only to those References where you can download a file. This search limits the results to all References with at least one Digital File or External Holding Location.

You should be aware that there may be cases where there are files that are accessible online but that you may not download because you do not have permission.

See Also

Holding Location Types and Attributes (Section 7.2)
 Permissions and Accessing Information (Section 5)

Reference Visibility

As mentioned at the beginning of Section 2.2.2, Public and Internal References, by default, are returned with a search. If you are only interested in seeing public Reference (i.e., see what results are returned to the public), you can limit your search results here. Likewise, you can limit your results to Internal References only.

If you have a need to access Restricted References (e.g., those that you own or have special permission to view), you will need to go to the Management Section or search for a Reference by Reference Code.

If you try to uncheck both options, then both will be reselected since searching for neither public nor internal will return no results.

See Also

Permissions and Accessing Information (Section 5)
 Management Interface (Section 4)

Holding Locations

In some instances, it may be important to filter the References returned by specific attributes of the Holding Locations. Perhaps the most common scenario is when you want to see all References where a physical copy resides at your park unit. Therefore, this section allows you to specify the criteria for the holding locations.

The screenshot shows the 'Holding Locations' section of a search interface. It includes a dropdown menu for 'Unit' with the following options: Description, Unit, Location, System, System Code, and Holding Owner. The selected unit is 'Rocky Mountain National Park (ROMO)'. There is an 'Add Filter' button and 'Clear Search' and 'Search' buttons.

You can add one or more holding types, and, for a given holding type, filter further within a given field.

References will be returned one or more of their holding Locations meet all of the criteria you have specified. For example, in the following example, References will only be returned in the search results if at least one of the Holding Locations is physically held at ROMO with 'trout' in the location field/

The screenshot shows the 'Holding Locations' section of a search interface with two filters. The first filter is 'Physical' with 'Unit' set to 'Rocky Mountain National Park (ROMO)'. The second filter is 'AND Physical' with 'Location' set to 'containing trout'.

See Also

Holding Locations (Section 7)

Reference Lifecycles

You can search by Reference lifecycle.

The screenshot shows the 'Reference Lifecycles' section of a search interface. It includes two filters: 'Legacy' and 'Active'. There is an 'Add Filter' button.

Note that 'Draft', 'Quarantined', and 'Inactive' are not options because Reference with these lifecycle states always have a visibility of 'Restricted' and are, therefore, never returned in the Advanced Search.

See Also

Reference Lifecycle States (Section 6.1)

Collections

You can specify one or more Reference Collections to search within. You can choose to only search within collections you own or can search within any other collection as well.

See Also

Manage Reference Collections (Section 4.5)

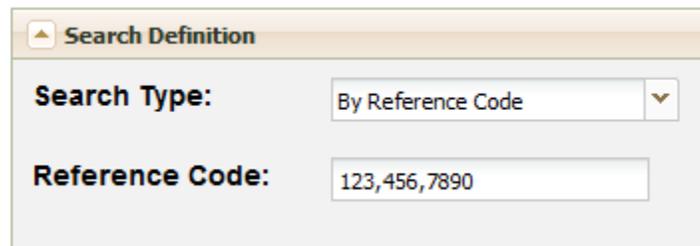
2.2.3 Search Type: By Reference Code(s)

This search will search for a specific Reference, using its unique Reference Code.

Reference Search


The screenshot shows a web form titled "Reference Search". It has a section labeled "Search Definition" with a dropdown arrow. Below this, there are two input fields: "Search Type:" with a dropdown menu set to "By Reference Code", and "Reference Code:" with a text box containing "1234". At the bottom right of the form are two buttons: "Clear Search" and "Search".

You can also specify up to 35 ReferenceCodes as long as they are comma delimited.



This screenshot shows the same "Reference Search" form as above, but with the "Reference Code:" text box containing the comma-delimited string "123,456,7890".

2.2.4 Search Type: GIS Data

This is actually a Saved Search configured to only return geospatial datasets in the Advanced Search. We included this as a search option because the GIS community was having a difficult time finding geospatial data.

<https://irma.nps.gov/App/Reference/Search/71? ts=0>

See Also

Advanced Search (Section 2.2.2)

2.3 Search Results

For any of the searches, when you run the search the Search Definition panel collapses for you to see the results. You can always expand the panel to revise your search criteria.

Data Store Search

Expand Panel to Revise Search Definition

Your search results have exceeded the limit of 2000 References that can be displayed.

Reference Code	Type	Display Citation	Title	File Count
2124855	Published Report	Ashton MW and Others. 2010. Observed and projected ecological response to cli...	Observed and projected ecological response to climate ch...	1
2166027	Unpublished Report	Avery C. 2006. Tomales Bay Environmental History and Historic Resource Stud...	Tomales Bay Environmental History and Historic Resource ...	1
614544	Unpublished Report	Baker BW and Others. 2003. Interaction of beaver and elk herbivory suppress...	Interaction of beaver and elk herbivory suppresses stand...	1
614589	Unpublished Report	Baker BW and Others. 2005. Resilience of willow stems after release from inte...	Resilience of willow stems after release from intense elk b...	1
2167518	Journal Article	Baker BW. 2003. Beaver (<i>Castor canadensis</i>) in heavily browsed environments...	Beaver (<i>Castor canadensis</i>) in heavily browsed environm...	1
2165099	Journal Article	Beja-Pereira A and Others. 2009. DNA Genotyping Suggests that Recent Brucel...	DNA Genotyping Suggests that Recent Brucellosis Outbre...	1
131513	Book Chapter	Brenner FJ and Others. 1987. Use of eye lens proteins as an indication of gene...	Use of eye lens proteins as an indication of genetic variat...	2
2168721	Geospatial Dataset	Bureau of ReclamationMike Pucherelli. 2005. Geospatial Vegetation Informati...	Geospatial Vegetation Information for the GRTE Vegetation...	4
2165157	Journal Article	Channing A, Edwards D. 2009. SILICIFICATION OF HIGHER PLANTS IN GEOTHE...	SILICIFICATION OF HIGHER PLANTS IN GEOTHERMALLY IN...	0
2166023	Dissertation	Cobb MA. 2010. Spatial Ecology and Population Dynamics of Tule Elk (<i>Cervus</i> el...	Spatial Ecology and Population Dynamics of Tule Elk (<i>Cervu...</i>	1
106988	Conference Proceedi...	Cole GF. 1982. Restoring Natural Conditions in a Boreal Forest Park. Pages [No ...	Restoring Natural Conditions in a Boreal Forest Park	0
2169767	Published Report	Cooper DJ. 2008. Prioritization of Riparian Restoration Projects in Kawuneeche ...	Prioritization of Riparian Restoration Projects in Kawuneece...	1
549166	Thesis	Copeland JP. 1996. Biology of the wolverine in central Idaho. University of Idaho...	Biology of the wolverine in central Idaho	0
2165213	Journal Article	Cross PC and Others. 2010. Probable causes of increasing brucellosis in free-r...	Probable causes of increasing brucellosis in free-ranging ...	0
1030069	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Hydrography for Elk Creek Falls, ID	1
1030073	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Hydrography for Elk River, ID	1
1030070	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Pipe and Transmission Lines for Elk Creek Falls, ID	1
1030074	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Pipe and Transmission Lines for Elk River, ID	1
1030072	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Railroads for Elk Creek Falls, ID	1
1030076	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Railroads for Elk River, ID	1
1030071	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Roads and Trails for Elk Creek Falls, ID	1
1030075	Geospatial Dataset	Data Archive Technician National Park Service, NR-GIS Data Store. 2004. 7.5 Mi...	7.5 Minute Roads and Trails for Elk River, ID	1

Page 1 of 40 Displaying results 1 - 50 of 2000

Create Or Update Collection

Restricted References (i.e., those that are Draft, Inactive or Quarantined and are inaccessible to almost everyone but the Reference Owners) are never returned with the Quick or Advanced Search. To optimize search speed, the Data Store does not determine whether you personally have permission to view restricted information, thus it only returns those records that you, as an NPS User, have full permission to access. If you have a need to access Restricted References (e.g., those that you own or have special permission to view), you will need to go to the Management Section or search specifically for a reference code.

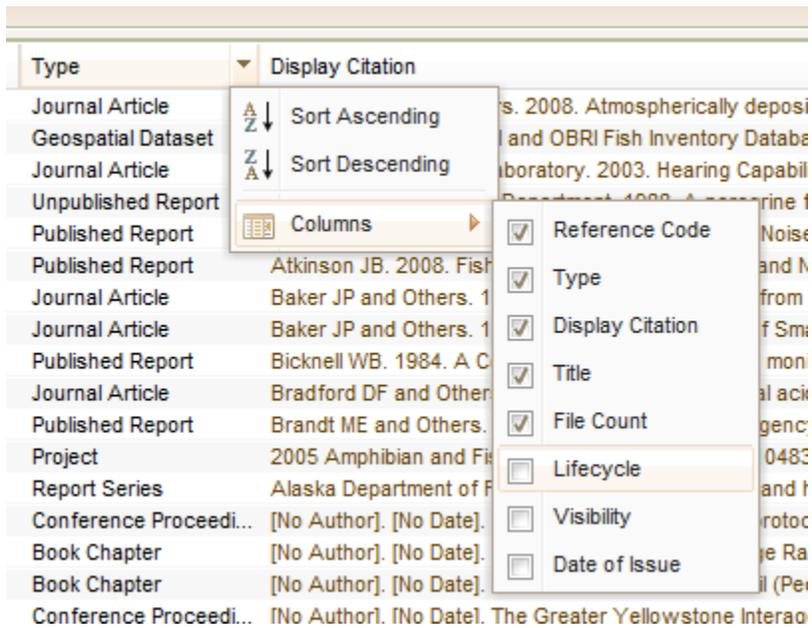
Other Notes:

- For all searches, you are currently limited to 2000 records. More than 2000 is impractical to browse through and is a good indication that you should revise your search criteria. In cases where you need to work with more than 2000 References (e.g., for management), we address this need in other ways (e.g., Download Search Results – Section 2.2.4).
- Expand the lower panel titled 'Create or Update Collection' if you want to add one or more References to your own personal collection.

Following specification of the search type and criteria, you should see a list of References that (1) meet your search criteria and (2) have a visibility of 'Internal' or 'Public'. The References are shown in a grid with five columns showing by default:

- Reference Code – The unique code for a Reference
- Type – Indicates the Reference Type.
- Display Citation – A quick summary of what the information is. Clicking on the display citation will take you to the profile for a given Reference.
- Title – The title of the Information Resource. Clicking on the title will take you to the Reference Profile.
- Attached File Count – If there are Digital or External Holdings that can be downloaded, this will have a value greater than 0. Clicking on the number will allow you to download the digital file. Please note that Reference does not validate whether the URL for external holdings is valid; some links may be out of date or not function properly.

Clicking on any of the column title gives you the option to sort or add other fields to the table.



If you are interested in exporting References locally, Section 18 gives you a number of options.

See Also

- Reference Profile Page (Section 2.2.4)
- Reference Type Definitions (Section 6.4)
- Visibility/Downloadability (Section 5.1)
- Holding Location Types and Attributes (Section 7.2)
- Exporting References to Desktop (Section 18)

2.4 Reference Profile

The Reference Profile is intended as a user-friendly way to view all of the information specific to the Reference.

2.4.1 Option Banner

The Option Banner provides options of what you are capable of doing with this Reference. Enabled options indicate available options. Most often, actions are dependent on being a Reference Owner.

Options > Data Store > Search > Profile

Add Digital File | Add Child | View Source XML | Clone

Edit Details | Change Type | Manage Link to Journal Issue | Inactivate | Quarantine | Activate

Theobald DM and Others. 2010. Estimating visitor use of protected areas by modeling accessibility: A case study in Rocky Mountain National Park, Colorado. Journal of Conservation Planning. 6: 1-20. Journal Article-2124472.

Journal Article

Reference Code: 2124472
Reference Status as of 08/13/2010: Active
Visibility: Public

Add Digital File

Anyone in the NPS can add (i.e., upload) a digital file for a Reference, regardless of whether they are the Owner. A digital file is the most common type of Holding Location (i.e., Directions on how to access the Information Resource), although there are other options from the Holdings Panel.

See Also

Add/Manage Holdings (Section 3.5)

Add Child/Add ...

As long as this link is active, anyone can add a new child Reference. For example, a Book Reference can have one or more related Book Chapters as children. If you are unsure of what a child reference is, be sure to read Section 5.2.3. If you click on this link, you will be taken to a page to create a new Reference (e.g., Create new Book Chapter that is part of this Book). If you already have a child reference that you wish to link to the parent, then you must go to the child Reference and select the option to manage its parent (Section 3.8).

See Also

Is Part Of Link (Section 5.2.3)

Editing a Reference (Section 3.4)

View Source XML

If the Reference was created from an XML metadata records, it is possible for anyone to view the source XML used to create the record. Please note that the source XML does not in any way reflect any changes made to the Reference since it was created. This link is always active if there is a source XML metadata record.

See Also

Create a Reference via XML Upload (Section 3.3)

Clone

You can create an almost identical Reference from the existing Reference.

See Also

Cloning (Section 6.10)

Edit Details

Any Owner of a specific Reference will have the option to edit the Reference.

See Also

Reference Owner (Section 5.3.1)

Editing a Reference (Section 3.4)

Change Type

This option allows the Owner to change the Reference type. This link will only be active for the Reference Owner(s).

See Also

Change Reference Type (Section 3.7).

Manage Link to...[Parent Reference]

If Active, you may add, remove, or re-link the Reference from/to a parent reference. This option supports the following cases:

- A Reference for a Project needs to be linked to a Program (e.g., Inventory and Monitoring), of which the Project is part of. Instead of creating a duplicate Reference for the Program, the Project is linked to the existing Reference for the Program.
- A Book is linked to the wrong Book Series. It is possible to re-link to the Book to the appropriate Book Series Reference.
- An existing Published Report needs to be linked to a Report Series.

This link will only be active if the following conditions are met:

- You are the Reference Owner
- The Reference does not already have active children References. For example, if a Book already has five child Chapters, it is not possible to change the parent Reference (i.e., Book Series) for the Book.

Clicking on the link will take you to the Manage Parent Reference Link page.

Managing the parent link applies only to the 'IsPartOf' link among two References.

See Also

Managing Parent Reference Link (Section 3.8).
IsPartOf Link (Section 6.9.1).
Reference Owner (Section 5.3.1).

Inactivate (Soft Delete)

If you Own this Reference and the Reference does not meet one of the following criteria, you can inactivate (i.e., soft delete) it:

- There are Active Holding Locations. This prevents you from inactivating a Reference where someone else has a copy of the Information Resource.
- There is an another Active Reference linked to this Reference. For example, you may not delete a Book if there are Book Chapters linked to it. In addition, you may not delete a Published Report if it is bundled with a project.
- There is at least one Approved Reference-Unit Link.

In most cases, inactivating a Reference doesn't remove it entirely from the system. Instead, its lifecycle state is set to Inactive, which means only you and other Reference Owners and Viewers may see the Inactive Reference. This is effectively a soft delete. The only time a Reference is completely removed from the system is if its lifecycle was 'Draft'.

See Also

Holding Location Types and Attributes (Section 7.2)
Inactivating/Deleting a Reference (Section 6.6)
Reference Unit Links (Section 8)
Reference Owners and Viewers (Section 5.3.1)
Reference Visibility/Downloadability (Section 5.1)

Quarantine

If you Own the Reference you can quarantine it at any time as long as it is not 'Draft', 'Inactive', or already 'Quarantined'. Quarantining a References removes it from circulation (i.e., visibility is set to restricted) and should be used when the intent is to ultimately re-activate the Reference.

See Also

Reference Lifecycle States (Section 6.1)
Reference Owners and Viewers (Section 5.3.1)
Reference Visibility/Downloadability (Section 5.1)

Activate

If you Own this Reference and the Reference is not already 'Active', you can Activate it. Activation indicates that all of the References is ready for broader circulation, either throughout the NPS and/or public.

In most cases, inactivating a Reference doesn't remove it entirely from the system. Instead, its lifecycle state is set to Inactive, which means only you and other Reference Owners and Viewers may see the Inactive Reference. This is effectively a soft delete. The only time a Reference is completely removed from the system is if its lifecycle was 'Draft'.

See Also

Reference Lifecycle States (Section 6.1)
Reference Owners and Viewers (Section 5.3.1)
Reference Visibility/Downloadability (Section 5.1)

2.4.2 Reference Header

The Reference header provides a few key pieces of information useful for the identification of the Reference and its status.

Add Digital File | Add Child | View Source XML | Clone

Edit Details | Change Type | Manage Link to Journal Issue | Inactivate | Quarantine | Activate

Theobald DM and Others. 2010. Estimating visitor use of protected areas by modeling accessibility: A case study in Rocky Mountain National Park, Colorado. Journal of Conservation Planning. 6: 1-20. Journal Article-2124472.

Journal Article

Reference Code: 2124472

Reference Status as of 08/13/2010: Active

Visibility: Public

At the top of the profile there is some summary information that includes the display citation for the Reference. This display citation is a quick synopsis of what the information resource is, including authors, date published, title, etc. It is automatically calculated based on the Reference Type and information within the core fields.

Below the display citation is the indication of what type of information it is, also known as a Reference Type. Reference Types are intended to be very descriptive and are tailored to the types of information frequently managed by the NPS community.

The unique identifier for the Reference. This code never changes and easily identifies and locates the Reference. For example, you can take the following URL, change the code, and you will be taken to that Reference profile.

<http://nrinfo/Reference.mvc/Profile?Code=662372>

Reference Status indicates whether the Reference is Draft, Legacy, Active, InReview, Quarantined, or Inactive. The Lifecycle of a Reference helps determine the Reference Visibility, or who can see the Reference. The status date indicates the last time the Reference was edited for any reason (not including the addition, editing or removal or Holding Locations).

Visibility indicates who is granted permission to view the Reference.

See Also

Visibility/Downloadability (Section 5.1)
Reference Lifecycle States (Section 6)
Reference Types (Section 6.4)
Core Panel (2.4.3)
Search by Reference Code (2.2.3)
Reference Type Definitions (Section 6.4)
Reference Owners and Viewers (Section 5.3.1)

2.4.3 Core Panel

The core tab shows the core identifying attributes for the Reference, including its title, brief description, authors, etc. If the Reference is linked to parent References via the 'Is-Part-Of' relationship, the attributes for the parent References will also be shown. For example, when viewing a Journal Article, attributes for the Journal Issue and Journal will also be shown in their own collapsible sub-panels.

▲ Core Information

▲ Journal

View Profile

Journal Title Journal of Conservation Planning

Journal Purpose / Description -

▲ Journal Issue

View Profile

Publication Date 2010

Volume 6

Issue -

Special Issue Title -

Brief Description -

Notes -

▲ Journal Article

Author David M Theobold ; John B Norman III; Peter Newman

Article Title Estimating visitor use of protected areas by modeling accessibility: A case study in Rocky Mountain National Park, Colorado

Article Brief Description Developed an approach to estimate visitor use by modeling the accessibility of a park by representing park entrances, road and trail infrastructure, trailhead locations, and off-trail travel.

Article Abstract/Full Description Increasingly, land managers need to better understand the spatial distribution of visitor use in parks and protected areas to address possible impacts on natural and cultural resources. Common surrogates of visitor use in protected areas based on spatial data include distance from roads and density of roads and trails. We developed an approach to estimate visitor use by modeling the accessibility of a park by representing park entrances, road and trail infrastructure, trailhead locations, and off-trail travel. We illustrate our approach on a case study of Rocky Mountain National Park, Colorado, USA. We compared accessibility measured as one-way travel time to density of roads and trails, and found that accessibility better differentiates use levels, particularly with respect to front-country and backcountry zones. We also illustrate how accessibility can be used to examine potential pathways of invasive species. We recommend that accessibility modeling can provide a useful way to generate maps of visitor use for understanding potential effects on parks and protected areas.

Article Page Range 1-20

Article Notes -

See Also

Is Part-Of-Link (Section 6.9.1)

2.4.4 Related Reference (children) Panel

If the Reference Type supports children References, this tab will be visible for any children References. For example, when viewing a Journal Issue reference, this section would be titled Journal Article(s).

▲ Journal Article(s)

Theobold DM and Others. 2010. Estimating visitor use of protected areas by modeling accessibility: A case study in Rocky Mountain National Park, Colorado. Journal of Conservation Planning. 6: 1-20. Journal Article-2124472.

See Also

Is Part Of Link (Section 6.9.1)

2.4.5 Information Resource Evaluation Panel

There are three ways an Information Resource can be evaluated. Information Resource Sensitivity Evaluation indicates if the Information Resource contains any type of sensitive information. Information Resource Proprietary Evaluation details whether the

Information Resource is copyrighted/proprietary and to whom it may be distributed. Information Resource Quality Evaluation provides rating of the quality of the information within the Information Resource.

Information Resource Evaluation

Sensitivity *Non-Sensitive* - The Information Resource does not contain any sensitive information.

Proprietary/Copyrights *Copyrighted, Distribute Internally* - Known to contain copyrighted information. Permission secured to distribute internally within NPS.

Quality *High* - The Information Resource is not known to be missing or contain misleading information AND adequate documentation on its generation is present. Generally, peer-reviewed materials (e.g., from published journal articles or rigorous monitoring programs) fall into this category.

These three categories have a strong bearing and who may access the information.

In addition, a Use Constraints field allows the Reference Owner detail any other considerations about the use of the information resource that isn't handled by one of the above categories.

See Also

Information Resource Evaluation (Section 6.2)
 Permissions and Accessing Information (Section 5)

2.4.6 Holdings Panel

A Holding (aka Holding Location) shows how to obtain the Information Resource, or the thing being described by the Reference. Holdings can refer to downloadable digital files, located at a park unit, or copies available from another web page. The Holdings section has two purposes. First, it shows all of the Holdings for the particular Reference. In addition, it allows anyone to add new Holding Location or, if they have permission, edit them. **Note: you do not need be the Reference Owner to add a Holding Location**

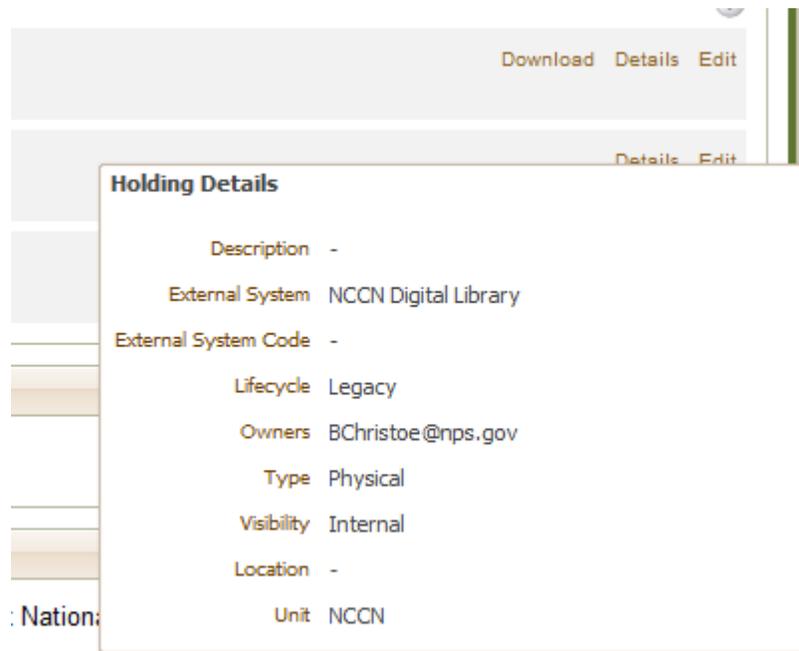
Holdings

Digital	Download Details Edit
LEWI_Landbird_Inventory_Report_2005Mar30.pdf	
Physical	Details Edit
NCCN :	
Cross Reference	Details Edit
TIC CrossReference	

On the right side of the panel are three possible options for a Holding Location – Download, Details, and Edit.

In cases where a Holding Location can be downloaded, a Download option appears to the right.

For all Holding Location, the Details option provides more detailed information about the Holding Location



If you have permission to edit a Holding Location, the Edit option will be visible. When you select this, you will be taken to the Edit Holding Location page.

There are four holding types:

- **Digital.** The Information Resource is a digital file that can be downloaded. Click on the 'Download' option to do so.
- **External Resource-** The Information Resource resides external to the Data Store but can be located directly with a URL.
- **Physical.** The Information Resource is held physically at an NPS Unit.
- **Cross-Reference.** A Reference to the Information Resource already exists in another NPS system like TIC, FOCUS.

For each Holding type, different attributes will be shown when clicking on the Details option. In addition, the following attributes are common to all Holdings:

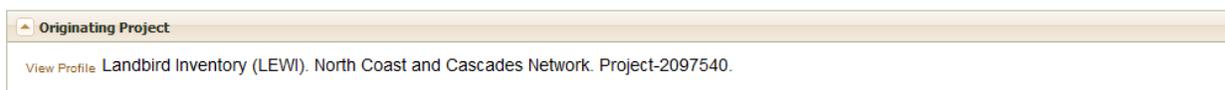
- **Owner.** The User who may edit the Holding
- **Visibility.** Indicates whether access to the Holding Location information is Public, Internal or Restricted.
- **Downloadability.** In cases where a digital file exists, indicates who may be able to download the file (Public, Internal, or Restricted).

See Also

Holding Locations (Section 7)
 Add/Manage Holding Location (Section 3.5)
 Holding Location Owners (Section 5.3.2)
 Permissions and Accessing Information (Section 5)

2.4.7 Project Panel

The Project panel indicates whether the Reference was generated by a Project.



If the Reference is a Project Reference Type, this section will show a summary of the products produced/generated by the Project.

Products

This Project Generated the following [7 Product\(s\)](#) [Add Products](#)

Grouped by Type

- Geospatial Dataset: 5
- Published Report: 2

Grouped by Unit

- Base Cartography Data Inventory (BCI): 1
- Soil Resources Inventory (SRI): 1
- Vegetation Inventory (VM): 2
- Wrangell - St Elias National Park and Preserve (WRST): 7

From the product summary, you can see a list of all products or a subset by Reference type or for a specific NPS unit.

All Products for Project 2170670 »

Wrangell-St. Elias Inventory Products. 2008. Project-2170670.

All Products

[Collapse All](#)

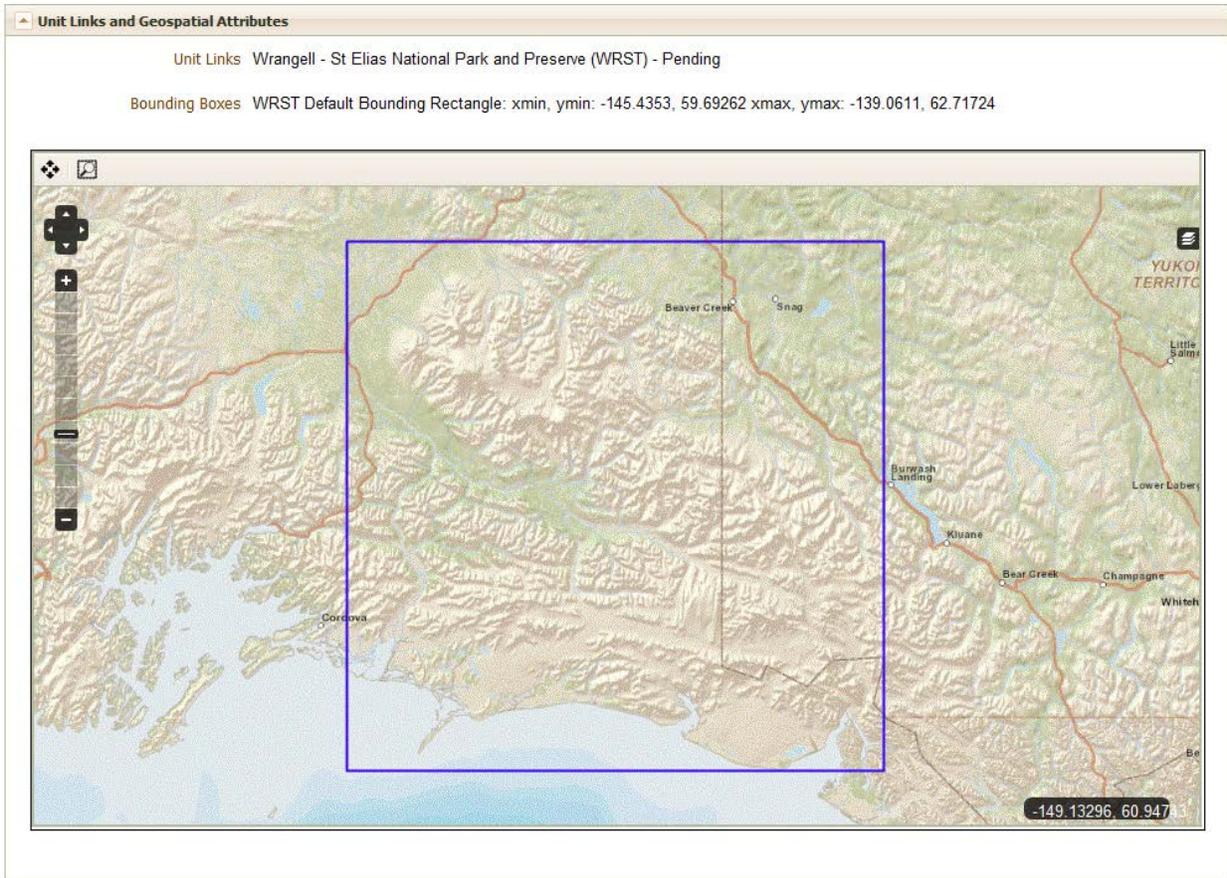
<input type="checkbox"/> An ecological survey for landcover mapping of Wrangell-St. Elias National Park and Preser... Published Report	Unit: WRST	View Profile
Digital LC_WRST_2008_Vol1.pdf		Download Details
Physical AKRO :		Details
Cross Reference TIC CrossReference		Details
<input type="checkbox"/> Ecotypes and Soil Landscapes for WRST 2008 -(Ref.Code: 2170266) Geospatial Dataset	Unit: WRST	View Profile
<input type="checkbox"/> Wrangell St. Elias image mosaic - true color -(Ref.Code: 2171665) Geospatial Dataset	Multiple Units	View Profile
<input type="checkbox"/> Wrangell St. Elias National Park and Preserve detailed vegetation -(Ref.Code: 2171667) Geospatial Dataset	Multiple Units	View Profile
<input type="checkbox"/> Wrangell St. Elias National Park and Preserve soils landscape -(Ref.Code: 2171666) Geospatial Dataset	Multiple Units	View Profile
<input type="checkbox"/> Wrangell St. Elias National Park and Preserve vegetation structure -(Ref.Code: 2171664) Geospatial Dataset	Multiple Units	View Profile
<input type="checkbox"/> Wrangell-St. Elias National Park and Preserve landcover mapping project -(Ref.Code: 65386... Published Report	Unit: WRST	View Profile

See Also

- [Link Project to Reference \(i.e., Bundle\) \(Section 3.6\)](#)
- [Generates/Was-Created-By Link \(Section 6.9.2\)](#)

2.4.8 Unit Links and Geospatial Attributes Panel

Unit Links indicates whether the Reference contains any information specifically about a NPS Unit. Unit links will be shown when their lifecycle state is Approved, Pending or Legacy.



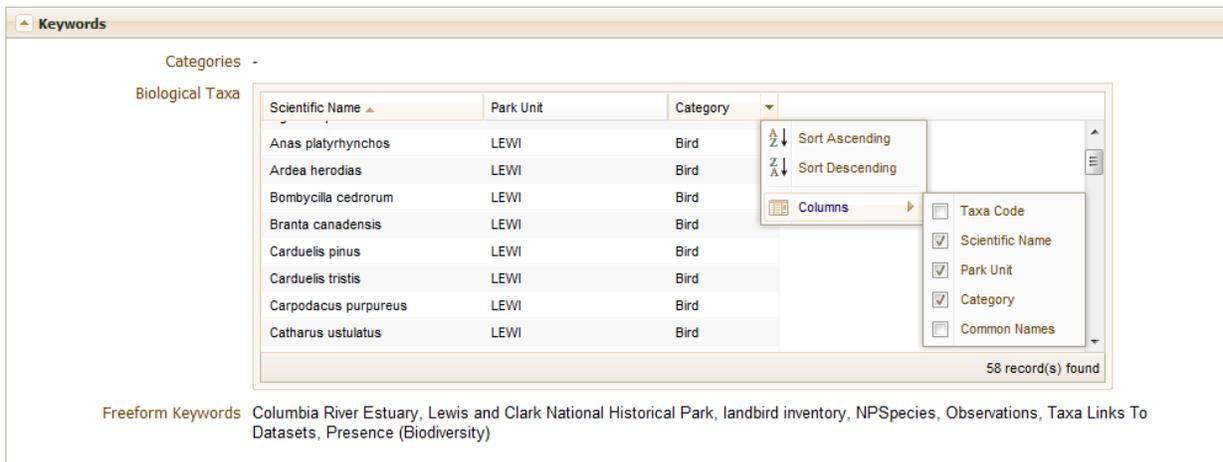
The bounding area defines the spatial footprint that the Information Resource describes. Each Reference can have one or more bounding areas.

See Also

- Reference Unit Links (Section 8)
- Reference Geospatial Attributes (Section 6.8)

2.4.9 Keywords Panel

There are three sections to the keywords panel.



Reference Categories

Reference Categories ultimately will show one or more fixed subject categories that have been linked to the Reference. This section is blank because the associated functionality is currently not available.

Biological Taxa

Biological Taxa indicates organisms that have been mentioned in the information resource and serve as additional keywords for the information resource. When an organism is presented in the context of an NPS Unit in the Biological Taxa table; NPS Unit acronyms will display to indicate that the organism is specific to the NPS Unit. Because this section is presented as a table, you have the options of sorting, moving columns, and adding columns.

Please be aware that the content of the Biological Taxa section (Reference-Taxa-Unit links) is in no way verified and may either be inaccurate or misleading. Therefore, using this as an official species list for a park unit is completely inappropriate. Please refer to [NPSpecies](#) whose function is to provide authoritative and validated species information for the respective park units.

See Also

Reference-Taxa-Unit Links (Section 9)

Freeform Keywords

This section presents zero or more freeform keywords for the Reference.

See Also

Editing Keywords (Section 3.4.4)

2.4.10 Owners and Permissions Panel

Currently, only Active Directory names are shown. This panel shows who the Reference Owners and Viewers are. Owners are always have permission to access all information about the Reference, including the ability to download any of the Digital Holding Locations. In addition, Owners may edit the Reference.

Viewers may view all information and download all associated Digital Holding Locations although they may not edit the Reference.



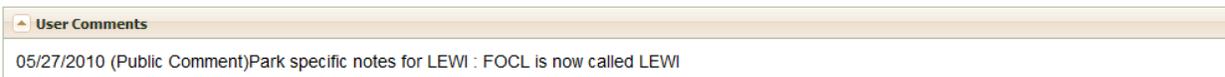
See Also

Record-Specific Permissions (Section 5.3)

Ownership of Legacy References, Holding Locations and Comments from NatureBib and the Data Store (Section 15)

2.4.11 User Comments Panel

This section shows private and NPS-wide comments. Private comments are those that only you can see while NPS-wide are those visible to the entire NPS.



Currently, it is not possible to create or edit comments. However, this panel may show information that was migrated from NatureBib.

See Also

Comments (Section 9)

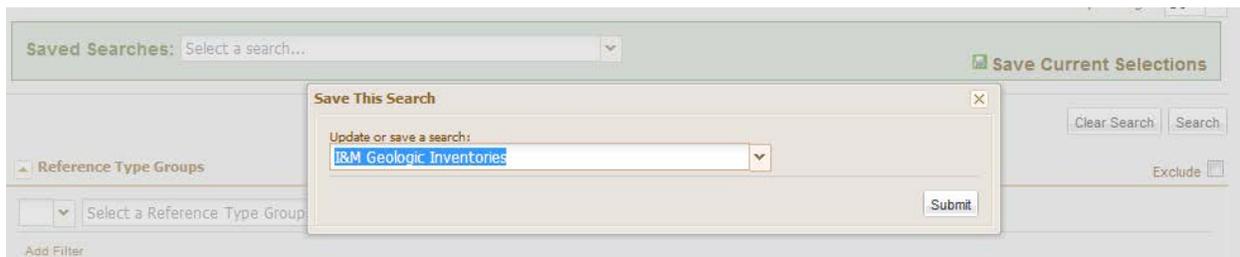
2.5 Saving Your Searches

Saved searches allow any NPS user to save one or more search criteria that are defined in the Advanced Search. Once saved, the person creating the search can repeat the exact same search at a later date or share the search with others, regardless of whether they are with the NPS or public.

The following concepts and rules apply to saved searches:

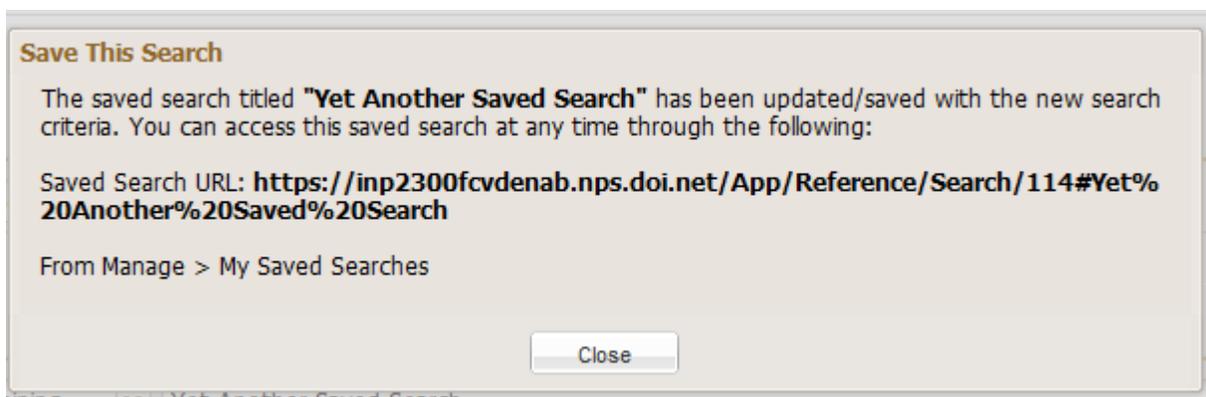
- Any NPS user can create one or more saved searches. There is currently no limit on the number of saved searches a user can create.
- By creating a saved search, you are the Owner and therefore may edit or delete the saved search. There is currently no way to share ownership.
- For a specific user, the name of the search must be unique. However, names must not be unique across all users.
- The results returned in saved searches are dynamic and likely to change over time.
- The number of records returned in a search will depend on whether the person running the search is internal to the NPS or is using the public portal.
- You may call anyone else's saved search at any time if you know the unique numeric search code.
- Only References that have a visibility of Public and/or Internal will be returned. There is currently no way to save searches that would return References that have a visibility of Restricted.
- Once you remove a saved search, it is gone forever. Anyone attempting to call that search will not be successful.

Creating a saved search is as simple as specifying your search criteria, clicking on the save current selections option, and giving your search a unique name.



You can create a new search or, by selecting an existing search, update the search criteria.

Once saved, you will be presented with a screen showing the URL of the search. You could send this URL to any user who, upon clicking on the URL, would activate a search within Reference.

**See Also**

Manage My Saved Searches (Section 4.3)

3 Create/Edit Interface

Tips and Rules for creating a Reference:

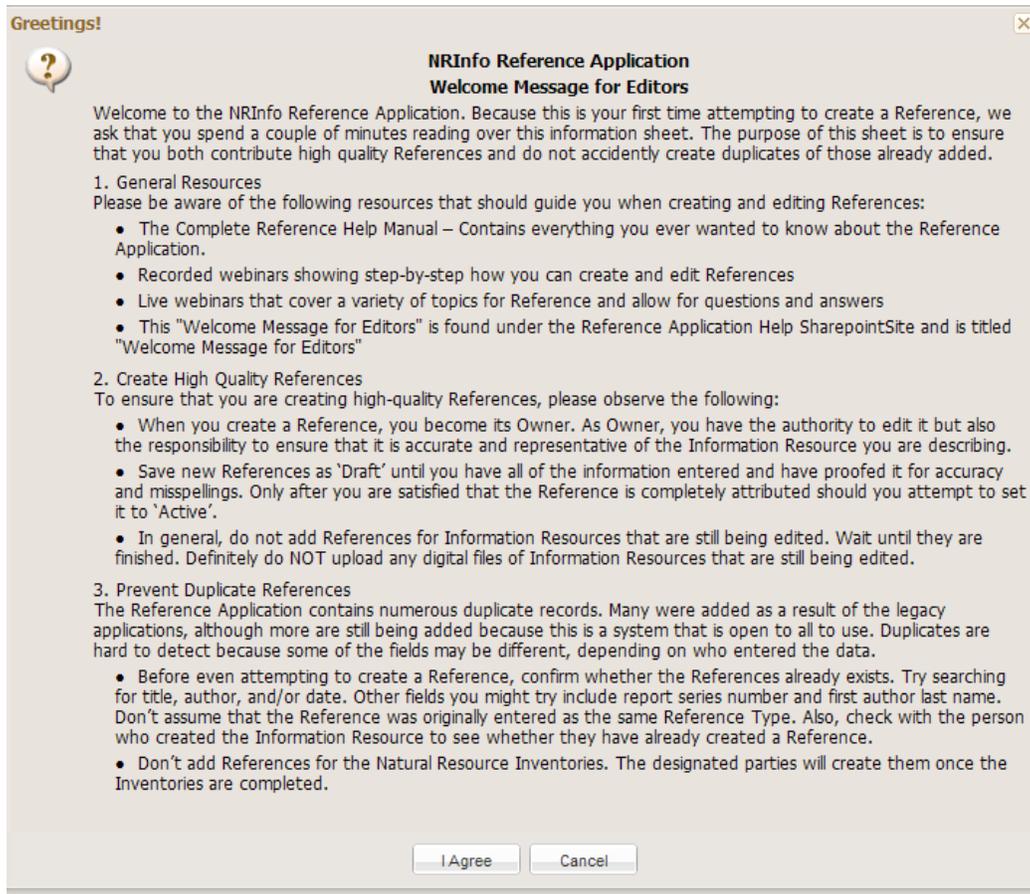
- Everyone with an NPS Active Directory account can create references.
- NPS staff from every resource discipline and program are invited and encouraged to use the Data Store. A reference record, or 'reference' is the essential metadata for a citation about an information resource.
- References do not include all of the information contained in the original information resource.
- A Reference entry is owned by its creator, who is responsible for its content.
- Users who create references must eliminate all sensitive and/or proprietary information in the reference record.
- Newly created references must include appropriate attribute values to protect sensitive and proprietary information.
- Viewing a reference and downloading an information resource depends on the assigned attribute values for a reference and its linked holdings.
- Create new references only for final versions of information resources, and upload only final electronic files.
- Failure to comply with the rules regarding sensitive and proprietary information can result in loss of privilege and/or disciplinary action.

There are three ways to create a reference:

1. From the top menu, select Add & Manage >> Data Store >> Create a Reference.
2. Create a local metadata record using NPS Metadata Tools and Editor or ESRI ArcGIS and then upload it to the Data Store by selecting Add & Manage >> Data Store >> Create a Reference From XML.
3. From an existing reference profile that supports child references, click on the link to Add the respective Child Reference (See Section 6.9.1).

3.1 Notice for First-Time Editors

The first time you attempt to create a Reference, regardless of whether you are using the form or are attempting to upload XML, you will be prompted with a welcome message. Please read it. Once you agree, you will not be prompted again. Its purpose should be rather self-explanatory.



*Note that text in this screen capture may differ from what you see online

3.2 Create a Reference Using a Form

One way you can create a Reference is to use the online form which will take you through a wizard to help fill in the required and optional information. While the wizard is a new and may be unfamiliar at first, it is intended to help prevent duplicate records and also minimize the amount of information you ultimately need to type.

Depending on the Reference Type, you may experience between 2 and 4 steps when creating a reference through the wizard. Those Reference Types that are linked to others may have additional wizard steps.

See Also

Is Part Of Link (Section 6.9.1)

3.2.1 Step 1.

In this first step, you will be asked to define a Reference Type to create.

Creating a New Reference

Step 1: Select a reference type.

Type

- Published Report
- Report Series
- Unpublished Report

Next

yes, it is a bit farther away than it needs to be

Please note that you can filter the list by typing any text.

If you are unsure of the specific type of information is, or none of the categories are adequate to describe the Information Resource, we recommend that you select the following:

- Generic Document - Any original or official paper that conveys information. Applied to any type of document that cannot be more specifically defined
- Generic Dataset - Applied to any type of spatial or tabular data that cannot be more specifically defined (e.g., as a vector dataset)
- Generic Multimedia - Any Information Resource pertaining to sound or graphics that is not described by a more specific Reference Type.

In most cases, following the creation of the Reference, you can change your mind and select the appropriate Reference Type.

See Also

Reference Type Definitions (Section 6.4)

Change Reference Type (Section 3.7)

3.2.2 Steps 2-4.

If the Reference you wish to create has no parents or grandparents, you will be taken to a form with a number of tabs: Core, Info Resource Evaluation, Units and Geographical, Keywords, and Permissions (Section 3.4) .If the Reference you want to create has a parent /grandparent, you will have a few extra steps.

Creating a Published Report

Step 2: Select or create a Report Series (Optional)

Select an existing Report Series

Skip this step

Create a new Report Series

Report Series Title *

Report Series Description

Contacts:

Contact Type	Individual/Business	Contact Information	Order

Delete Selected Contact Add New Contact Edit Selected Contact

Start Over Next

For example, if you want to create a Reference for a book chapter, the wizard will take you through a few steps. As described in Section 6.9.1, a book chapter has a required parent (i.e., book – you can't have a book chapter without knowing the book) and an optional grandparent (i.e., book series – books sometimes are part of book series, but not always).

Thus, for the book chapter, Step 2 will give you three options:

- Select an Existing – If the book series already exists in the Data Store, you can select it by typing in any word to limit the list of possible Book Series.
- Skip this Step – If the book is not part of a book series, you can skip this step. Please note that you can always link the book to the book series at a later time if you need to.
- Create a New – If the book series does not already exist, you can create a new book series. The wizard will walk you through the step to create the Book Series prior to creating the Book reference.

The next steps will take you through the wizard process for a book. Once you have selected or created a book, you will then be taken to the page to edit the information specific to the book chapter information.

See Also

Editing a Reference (Section 3.4)

Is-Part-Of Link (Section 6.9.1)

3.3 Create a Reference by Uploading XML Metadata

One or more local XML metadata records can be uploaded to create new References in lieu of creating one in the online form. From the main Reference tab, choose Upload.

Portal > Home > IRMA Applications > Data Store > Create from XML Bf-rakes

Create a record using an XML file »

1) Select a Reference Type
 Geospatial Dataset

2) Select XML file(s) and then upload

Name	Status	Size	Progress	Detail
ease_tele.shp.xml	Uploading	14 KB	<input type="text"/>	clear
ease_tele_centerline.shp.xml	Uploading	17 KB	<input type="text"/>	clear

0 of 2 Complete

Since only one profile is supported, you can overlook this option.

First, select the Reference type which you wish to create. Currently, all dataset Reference Types are supported with the default being 'Geospatial Dataset'.

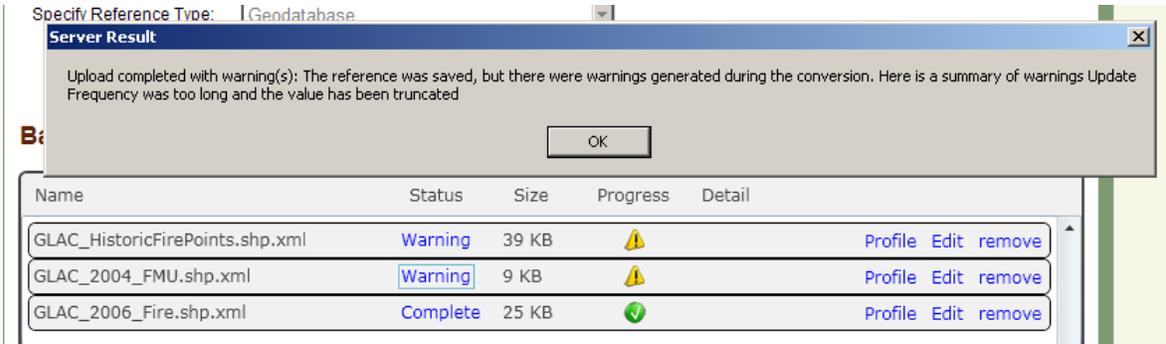
Second, browse to one or more local XML records on your desktop and select them.

Third, click up 'Upload' to begin the process of uploading.

When an XML record is uploaded, Data Store will attempt to parse the record as best as possible. It is important to note that:

- Parsing errors will be ignored
- Text larger than the maximum field size will be truncated in the reference. This is often the case for the 'Brief Description' field.
- A copy of the original XML will be preserved. In addition, a copy of the XML will be updated to reflect the path (i.e., <network> where the digital file can be downloaded. All other changes to the Reference will not be reflected in the XML. For example, a modification to the title will not be reflected in the XML.
- The ability to view the Reference with a geospatial search relies upon good bounding area coordinates. It is best to make sure they are in the XML before uploading.
- All References created are saved as 'Draft'. You will need to activate those References before they are visible to a broader audience.

Following the creation of the Reference(s), you have the option of viewing the Reference profile for any one of the records will be taken to the Reference Profile page or you can go directly to the edit session. Clicking on remove does not inactive/delete your Reference; it only remove the upload history from this screen.



Other Notes

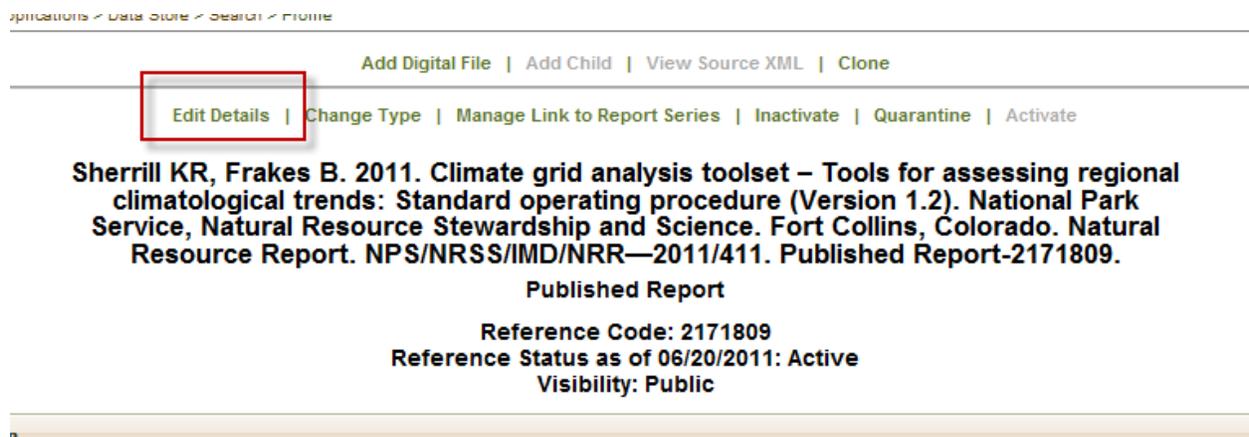
- You do not need to create a separate holding location for the XML file - you have already uploaded it.
- If you are unsure of which XML template to use, here is an example XML metadata record ([XML file](#)).
- If you want the Reference to be loaded to Geospatial One Stop, your metadata must meet some requirements. Foremost, the Metadata Date field (metadata/metainfo/metd) needs to be updated. In addition, Geospatial One Stop has their own [requirements](#) for accepted xml for upload. However, XML metadata with NPS Metadata Profile elements like UnitCode is accepted as well. If possible, use [MetaParser](#) to check the XML metadata prior to upload.

See Also

Rules for Mapping XML to the Data Store (Section 13)
Editing a Reference Page (Section 3.4)

3.4 Editing a Reference Page

To edit a reference, go to Edit Details on the Reference Profile page.



When editing a Reference, you will see a number of tabs, including Core, Information Resource Evaluation, Units Links and Geospatial Attributes, Keywords, and Owners and Permissions. We recommend that you visit each tab when creating or editing a Reference, although the most important tabs you should visit are the first two – Core and Information Resource Evaluation.

In rare cases when attempting to edit a Legacy NatureBib Reference, you may see the following popup:

Note: The NPS-Only Reference Sensitivity will no longer be supported. Please review the Information Resource Evaluation tab and remove any NPS-Only sensitive information from the Reference.

OK

Cancel

If you do, then refer to Reference Sensitivity Popup (Section 3.4.6).

3.4.1 Core Tab

The core tab is where the critical and required information about a Reference is entered. Depending on the Reference Type, the number of fields, their labels and whether or not they are required will change. An asterisk will indicate those fields that are required. A list of all of the possible Core fields is found in Section 5.3..

This section also allows the Reference Owner to define various contact types (e.g., authors, editors, publishers, etc.) and Sizes (e.g., number of pages, physical size, recording length, etc.).

See Also

Contact Types (Section 6.5.2)

Reference Sizes (Section 6.5.3)

3.4.2 Information Resource Evaluation Tab

INFORMATION RESOURCE SENSITIVITY EVALUATION

Non-Sensitive
 Sensitive
 Unknown

If Sensitive, Check 1 or More

Operations
 Archeological
 Endangered
 Security
 Caves
 Personal Info
 Indian Sacred Sites
 Threatened
 Commercial Value
 Minerals
 Wells
 Cultural
 Paleontological

INFORMATION RESOURCE PROPRIETARY EVALUATION

Non-Proprietary
 Proprietary/Copyrighted
 Unknown

If Proprietary, Choose 1

Permission to Distribute
 Permission to Distribute for Non-Commercial
 Permission to Distribute Internally
 No Permission to Distribute

INFORMATION RESOURCE QUALITY EVALUATION

High
 Medium
 Low
 Poor
 Unknown

Use Constraints:

The information on this tab is critical to evaluate some key qualities of the information resource being described by the Reference. It is important to note that this evaluation is strictly for the Information Resource and not for the Reference. **DO NOT embed any sensitive and/or proprietary information into the Reference itself.**

The evaluation is a critical determinant in who can see the Reference and/or download a digital file (if one exists).

The Information Resource Sensitivity Evaluation allows you to Choose between one of three options:

- **Non-Sensitive** – The Information Resource does not contain any sensitive information
- **Sensitive** – If you select this, you must specify why the Information Resource is sensitive. Because an Information Resource can be sensitive for a number of reasons, select all that apply.
- **Unknown** –The Information Resource has not been evaluated to determine that it contains sensitive information AND there is a likely chance that it may contain sensitive information. Materials that can be found in public libraries or are highly circulated (e.g., journal articles, books, etc.) are very unlikely to contain sensitive information.

If you select Sensitive, you will be asked to further specify why the Information Resource is sensitive by selecting one or more categories.

Note: If you select Unknown or Non-Sensitive on a Reference previously saved as Sensitive, all of the Sensitivity criteria check boxes will be cleared. If you accidentally do this, you can restore your selection by clicking 'Reload Saved Values'.

The Information Resource Proprietary Evaluation also lets you choose between one of three options:

- **Non-Proprietary** – The Information Resource does not contain any proprietary information.
- **Proprietary** – If this is selected, please specify exactly why the Information Resource is proprietary. Only one proprietary level can be selected. Please note that journal articles are almost always proprietary. Unless otherwise known, please indicate that this is proprietary without permission to distribute. This evaluation will not affect the ability of NPS users to discover the Reference but will prevent the automatic download of a digital file, in cases where one exists.
- **Unknown** – The Information Resource has not been evaluated to determine that it contains sensitive information AND there is a likely chance that it may contain sensitive information. Note that materials which are found in public libraries or are sold without restriction (e.g., journal articles, books, etc.) do not contain sensitive information.

If you select Proprietary, you must detail at what level it is copyrighted.

The Information Resource Quality Evaluation section permits you to choose one of the following:

- **High** – No missing or misleading information with adequate documentation. Frequently peer-reviewed materials.
- **Medium** – Missing some information, but not what is essential to the correct interpretation. Some internal review of the Information Resource, but not a formal peer-review.
- **Low** – Missing information and/or limited documentation.
- **Poor** – Has missing and misleading information.
- **Unknown** – Unknown and/or unevaluated.

You are always free to comment on any other issues related to the access and use of the Information Resource. Please note that Reference will in no way make use of this text statement to control who has access to the Information Resource.

See Also

Information Resources Evaluation (Section 6.2)
 Visibility/Downloadability (Section 5.1)

3.4.3 Units and Geographical Tab

This tab covers two topics: what is specific to a park unit and what is relevant to the park unit.

A Reference should only be linked to a NPS Unit if the Information Resource contains information specifically about that Unit.
 See help for more guidance.

Rocky Mountain National Park (ROMO) Add Unit Automatically Add Bounding Box

Units			
Name ▲	Code	Status	
Rocky Mountain National Park (ROMO)	ROMO	Pending	delete

Add Bounding Box

Bounding Boxes	
Name ▲	Coordinates
<input type="checkbox"/> ROMO Default Bounding Rectangle	xmin, ymin: -105.913713909686, 40.1580668464303 xmax, ymax: -105.49358...

Delete Selected

Save and set to

Reference Unit Links

Linking a Reference to a Unit means that the Information Resource contains information specifically about that Unit. Having such a strict definition about the Unit link ensures that Users can always search for and discover information specific to their parks. Other reasons that have historically been used to link a Reference to a Unit is handled elsewhere. (e.g., a copy is housed at the Unit, the Unit uses the Information Resource, a person at the Unit really likes the information resource, it was produced by the Unit, etc.) References can be linked to one or more Units. When a Unit is added, "Pending" will appear under the status field. This pending refers to the Unit Steward/UPOC approval process, where they confirm that the information resource does indeed contain information about their Unit.

When adding a Unit, a bounding box will automatically be added, unless you uncheck the option. In general, we recommend you always leave this checked. There are only a few cases where a geographic bounding box is misrepresentative (e.g., Office Units) and it is far easier to delete an additional bounding box than trace out one by hand. The default name of the bounding box is: "[UnitCode] Default Bounding Rectangle".

The Unit selector filters by typing in any part of the Unit name or code.

See Also

Reference Unit Links(Section 8)
 Reference Geospatial Attributes (Section 6.8)
 UPOC Approvals

Spatial Bounding Area

The spatial bounding area defines the geographic relevance of the information resource. A Reference can have one or more bounding areas to represent any location. For example, a project that inventoried vegetation may have occurred in three separate regions of the park. In this case, it would be very easy to create three different bounding boxes.

Bounding boxes may overlap zero or more parks, especially in cases of general references. For example, a book titled "Birds of Colorado" would have a bounding box for the entire state of Colorado.

When defining a bounding area, please be aware of accidentally disclosing the location of sensitive information. For example, if you are describing a report about cave entrances, we strongly recommend against having anything more detailed than a bounding box for the entire park.

There is no limit on the number of bounding boxes a Reference can have.

See Also

Reference Geospatial Attributes (Section 6.8)

3.4.4 Keywords Tab

Reference currently supports two types of keywords: freeform keywords and biological taxa.

The screenshot shows a web interface with a navigation bar at the top containing tabs: Core, Information Resource Evaluation, Units and Geographical, **Keywords**, and Permissions. The main content area is divided into two sections:

Keywords: A text input field with the label "(Comma Delimited)" containing the text "wolf, mammal, furry-four-legged-critter".

Biological Taxa: A table with the following data:

Taxa Code ▲	Scientific Name	Unit(s)		
93337	Canis lupus Linnaeus, 1758	ROMO	edit units	delete

At the bottom right of the Biological Taxa section, it says "1 record(s) found" and there is an "Add Biological Taxa" button.

Note that the functionality to add/remove Reference Categories is not yet available.

Free Form Keywords

You are free to add as many keywords as you wish. Keywords should be comma-delimited. Please follow the general rules for adding keywords:

- Keywords should be Proper Case, meaning that the first letter should be capitalized (e.g., Fish Chips)
- Common words, including 'and' and 'or' are generally lower case (e.g., Fish and Chips)
- Species names represented in lower case (e.g., *Pyloodictis olivaris* and *Solanum tuberosum*)
- Acronyms, including those for NPS units, are capitalized (e.g., FNC)

Please note that you will not, in almost all cases, be able to control the case of the keyword. The Data Store does not preserve unique cases of keyword. This was done to ensure better search performance and also make case more consistent among keywords. Therefore, the first time a keyword is entered, the case is fixed. We will routinely monitor keyword case and fix those that do not follow the rules defined above.

See Also

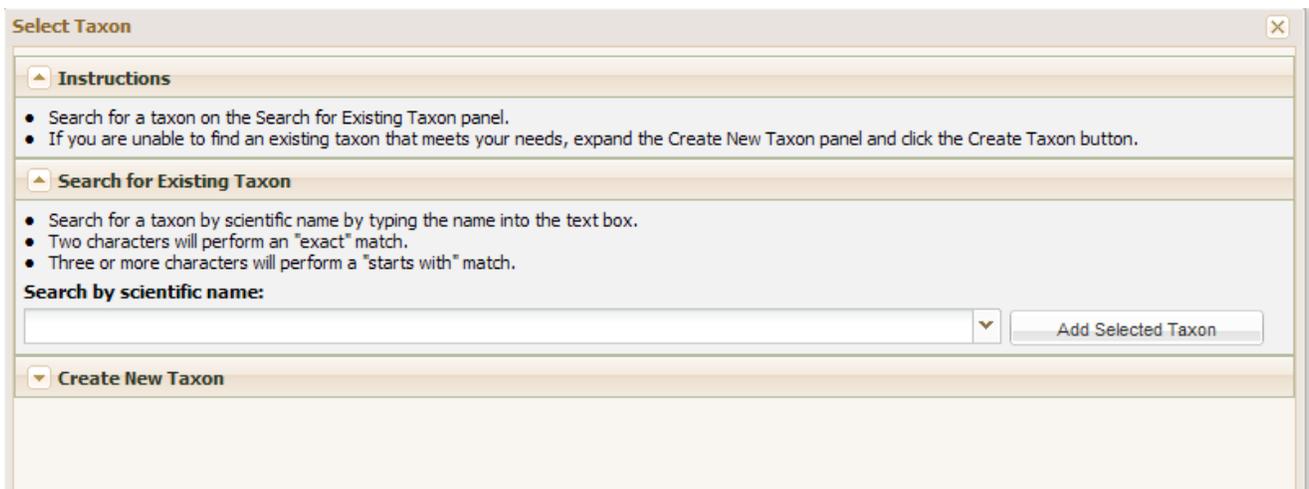
Reference Profile: Keywords Panel (Section 2.4.9)

Biological Taxa

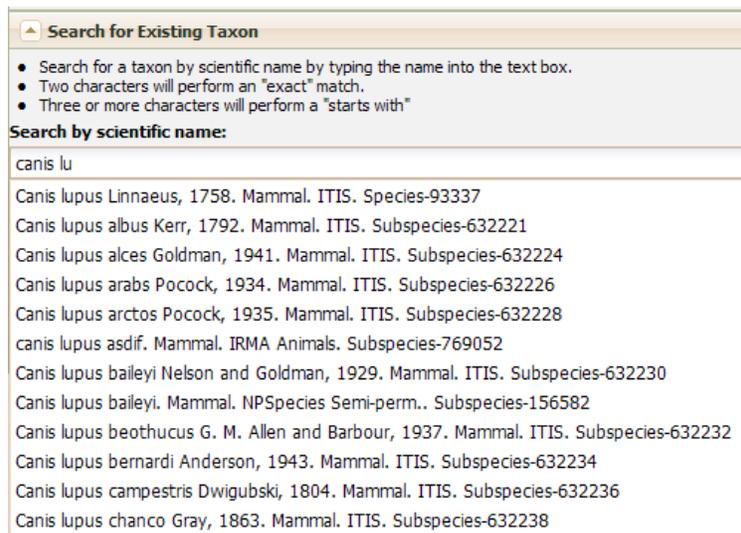
You can link a Reference to zero or more taxa and optionally specify one or more NPS Unit acronyms for each taxa added. Please be aware that currently, this tool is geared towards users who have some knowledge of biology and may be overwhelming to those who have no experience with taxonomy. Thus, this tool only works with scientific names (rather than common names) and will often require that you pick from a number of taxa with virtually identical species names.

The screenshot shows a web interface titled "Biological Taxa". It features a table with the following columns: "Taxa Code" (with a dropdown arrow), "Scientific Name", and "Unit(s)". The table is currently empty. At the bottom right of the table area, it says "0 record(s) found". Below the table, there is a button labeled "Add Biological Taxa".

By clicking on the 'Add Biological Taxa' button, you initiate a popup for selecting a taxon to add.



This popup contains three collapsible panels, with the first two being expanded. In most cases, the taxon is likely to already exist in our system. Therefore, you should always search for the taxon by scientific name to see if it already exists within the application. By typing in at least three letters, you initiate a search for names that begin with the specified text that returns a list of possible results. This list will narrow as you continue to type.



If, after searching for a taxon, you discover that it does not exist, your other option is to create a new taxon. If you decide to go this route, please click the Create Taxon button in the Create New Taxon panel and see the help provided here

<https://nrinfo.nps.gov/Help.mvc/ShowPageContent?realm=Primary&domain=Biology&path=Taxonomy.Create>

Otherwise, as you can see, there will often be a number of taxa to choose from. When in doubt, add the taxon at the top on the shortlist since we have the ITIS accepted species sorting to the top.

Select Taxon

Instructions

Search for a taxon on the Search for Existing Taxon panel.

If you are unable to find an existing taxon that meets your needs, expand the Create New Taxon panel and

Search for Existing Taxon

Search for a taxon by scientific name by typing the name into the text box.

Two characters will perform an "exact" match.

Three or more characters will perform a "starts with" match.

Search by scientific name:

Create New Taxon

Canis Linnaeus, 1758. Mammal. ITIS. Genus-93336

Canis adustus Sundevall, 1847. Mammal. ITIS. Species-86128

Canis adustus adustus Sundevall, 1847. Mammal. ITIS. Subspecies-631307

Canis adustus bweha Heller, 1914. Mammal. ITIS. Subspecies-631309

Canis adustus grayi Hilzheimer, 1906. Mammal. ITIS. Subspecies-631311

At this point you have the following options:

- Start Over – Go back to the beginning of the 'Add Taxon' form without linking the taxon to the Reference.
- Finish and Add Another– Link the taxon to the Reference and then go back to the beginning of the 'Add Taxon' form.
- Finish and Close-Completely close out of the 'Add Taxon' form and return to editing your Reference profile.

In cases where the taxon does not exist from the select taxon picklist, you do have the option of creating your own.

Search for Existing Taxon

Search for a taxon by scientific name by typing the name into the text box.

Two characters will perform an "exact" match.

Three or more characters will perform a "starts with" match.

Search by scientific name:

Create New Taxon

Only create a new taxon if you are unable to find an existing taxon by searching on the Search for Existing Taxon panel.

The Create Taxon button will not be enabled until you have searched on the Search for Existing Taxon panel.

Finally, whether you have used an existing taxon or have created your own, you may optionally link a taxon to a NPS Unit(s). Linking a taxon to a Unit(s) can be done if, and only if, the Reference is already linked to a NPS Unit(s). For guidance on when to (and when not to) link a taxon to a Unit, please refer Section 9.

**See Also**

Reference-Taxa-Unit Links (Section 9)
Reference Unit Links (Section 8)

3.4.5 Permissions Tab

In this tab, you can add and remove Reference Owners and Viewers. Reference Owners have permission to edit the Reference and download all digital attachments for the specific Reference. Reference viewers have permission to download all digital attachments for a specific Reference.

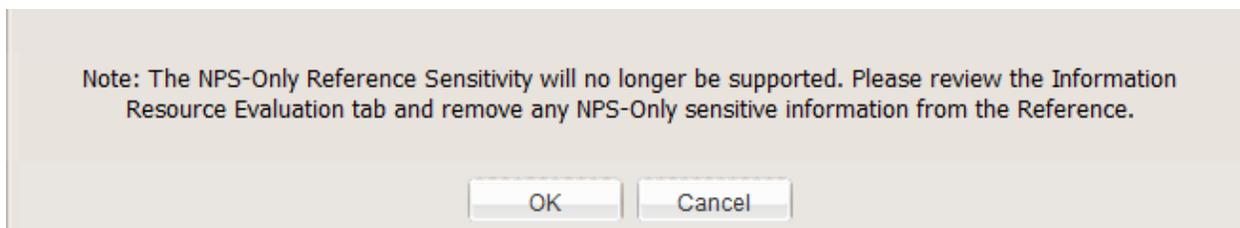
See Also

Visibility/Downloadability (Section 5.1)
Record-Specific Permissions (Section 5.3)
Add/Manage Holdings (Section 3.5)

3.4.6 Reference Sensitivity Popup Warning

In NatureBib, there were approximately 8,000 citations that were marked as NPS-only at the Reference level. This had the general connotation that there was sensitive information placed within the citation (e.g., T&E Species locations were disclosed in the abstract of the citation). The Data Store does not allow one to designate a Reference as being sensitive; Sensitivity can be applied only to the Information Resource. Thus, Users are discouraged from ever placing sensitive information within the Reference.

To accommodate the possibility that someone did place sensitive information within the Reference itself, we have all of these records set to a visibility of restricted. When you edit the Reference for the first time, you will see the follow message:



What the message is trying to say is do these two things:

1. Remove any sensitive information from the Reference since it is presumably in the Information Resource already
2. Go to the Information Resource Evaluation panel and indicate how the Information Resource is sensitive or proprietary. If you don't do this, the Reference may go public.

Once you activate the Reference, you will not see this message again.

See Also

Visibility/Downloadability (Section 5.1)

3.4.7 Buttons

Cancel

Clicking on this button cancels the edit session without any changes from any of the tabs being committed. User is returned to the Reference Profile page.

See Also

Reference Profile (Section

Save for Review

Clicking on this button saves the changes made from all of the tabs, but does not attempt to Activate the Reference. Thus, the Reference Lifecycle State will be In Review.

See Also

Reference Lifecycle States (Section 6)

Visibility/Downloadability (Section 0)

Quarantine

This Quarantines the References, which affects the Reference Visibility. This is a fast way to immediately suspend visibility and accessibility to the Reference.

See Also

Reference Lifecycle States (Section 6)

Visibility/Downloadability (Section 0)

Save as Active

This button commits all changes from all tabs and also activates the Reference.

See Also

Reference Lifecycle States (Section 6)

Visibility/Downloadability (Section 0)

3.5 Add/Manage Holdings

The addition and editing of Holding Locations is entirely independent of managing a Reference. Thus, any User can create a Holding Location for a Reference, even if they do not Own the Reference. By creating a Holding Location, the User becomes the Owner of that Holding Location.

After adding or finding a Reference to which you want to add a Holding, you can easily add a digital file from the option panel.

ons > Data Store > Search > Profile

Add Digital File | [Add Child](#) | [View Source XML](#) | [Clone](#)

[Edit Details](#) | [Change Type](#) | [Manage Link](#) | [Inactivate](#) | [Quarantine](#) | [Activate](#)

**Shults BS and Others. 1991. Middle Noatak River moose census - November 1994.
 Unpublished Report-167735.
 Unpublished Report**

Or you can add any type of Holding Location from the Holding Location Panel by clicking on the plus sign.

The screenshot shows a panel titled 'Holdings' with the text 'Holdings Have Not Been Identified'. A small square button with a plus sign (+) is highlighted with a red box in the top right corner of the panel.

And then selecting a Holding Type to Create

The screenshot shows the 'Holdings' panel with the text 'Holdings Have Not Been Identified'. A dropdown menu is open, showing the text 'Add New Holding of Type' followed by a list of options: 'Select Type...', 'Select Type...', 'Digital File', 'External Resource', 'Physical', and 'Cross Reference'. The 'Digital File' option is highlighted in blue. Below the 'Holdings' panel is another panel titled 'Unit Links and Geospatial Attributes'.

See Also

Holding Location Owner (Section 5.3.2)
 Holding Locations (Section)

3.5.1 Add/Edit Holding Location

When creating a new Holding Location, you are presented with four options for adding a Holding Location:

- **Digital.** The Information Resource is a digital file that you intend to upload from your desktop.
- **External Resource-** You have a URL that points to the file at some other web site (e.g., USGS web page).
- **Physical.** The Information Resource is managed locally at your NPS Unit. The Information Resource can be either hardcopy or digital.
- **Cross-Reference.** A Reference to the Information Resource already exists in another NPS system like TIC or FOCUS.

Other Notes:

- Depending on the holding type, the attributes will change.
- If you are editing an existing Holding Location, you will not have the option to change the Holding Type.

See Also

Holding Locations (Section)
 Information Resource Evaluation (Section 6.2)

Digital File

You are encouraged to add digital files to the Data Store - a Reference isn't worth much if there isn't an information resource to go with it. For a given Reference, you can add one or more digital files as individual holding locations.

First, please read the disclaimer if you have not already. It advises you on how to handle sensitive and copyrighted materials.

Second, click on the 'Select Files' button and browse the file(s) you wish to upload for a given Reference.

Add Digital Holding »

Shults BS and Others. 1991. Middle Noatak River moose census - November 1994. Unpublished Report-167735.

❗ Read Disclaimer

Upload New Files

Name	Status	Size	Progress

Total: 0 0 KB of 0 KB

Add Descriptions to Uploaded Files (Optional)

Add or Remove Owners (Optional)

 Save and set status to:

Third, click upload and wait for the files to upload. You should never experience issues (e.g., timeouts) when uploading a file less than 4 gigabytes in size. If you do experience problems, please contact us.

Name	Status	Size	Progress
Example File 1.pdf	Complete	1 MB	✔ clear
Example File 2.pdf	Complete	1 MB	✔ clear

Total: 2 2 MB of 2 MB

2 Files Uploaded

Example File 2.pdf

Example File 1.pdf

Add or Remove Owners (Optional)

	User	Permission
delete	bfrakes@nps.gov	Owner
delete	MBeer@nps.gov	Owner

User:

 Save and set status to:

Fourth, optionally add helpful descriptions of each file and/or add other Holding Location co-Owners.

Finally, save the Holding Location as Draft or Active.

Other Notes:

- Zip up shapefiles, file geodatabases or other file formats which are composed of multiple dependent pieces. **Do not create a separate Holding Location for each piece.**
- You have likely noticed that there is no ability to indicate whether the digital file is sensitive or proprietary. The ability to do this is at the Reference level. This prevents holding locations of the same information resource being attributed differently. For example, if there were two identical copies of a journal article with proprietary information, it would be nonsensical for one to be attributed as non-proprietary while another is attributed as proprietary.
- You can manage Ownership of the Holding Locations separate from the Reference.
- If you edit a Digital Holding, you may not specify a new file. Instead, you will need to Inactivate the existing Holding Location and create a new one.

External Resource

If a digital file exists on another web site, then create this type of Holding Location.

Add External Resource Holding »

Abbott SM. 1993. Annual report of survey-inventory activities - moose. Alaska Dept. of Fish and Game. Book-2081900.

Description

* URL

* Date URL Last Visited

	User	Permission
delete	bfrakes@nps.gov	Owner

User:

Physical

Use the Physical Holding Location if you have a copy of the Information Resource in your office. The copy can be hardcopy or digital.

Add Physical Holding »



Abbott SM. 1993. Annual report of survey-inventory activities - moose. Alaska Dept. of Fish and Game. Book-2081900.

Description:

* Unit:

* Location:

System:

System Code:

▲ Add or Remove Owners (Optional)

	User ▲	Permission
delete	bfrakes@nps.gov	Owner

User:

Save and set status to:

Cross Reference

Create a cross-Reference Holding Location if a copy of the Information Resource exists in another system, including TIC or Focus.

Holding Type

Description

External System *

External System Code *

Select Unit

Permissions

User ▲	Permission	
bfrakes@nps.gov	Owner	delete

User:

Save and set to

[Cancel](#)

Other notes:

- You are not limited to selecting from the list External Systems. We provide this list to maintain consistency, recognizing that there are other systems beyond the handful listed here.

3.6 Link Project To Reference (i.e., Bundle)

This page allows you to bundle one or more References in the context of a Project. By definition, bundling implies that a Project 'Generated' an Information Resource. Examples of References that can be bundled with a Project include Published Report, Unpublished Report, Map, and Relational Database.

To bundle a Reference, the following criteria must be met:

- The Reference was not already bundled with another Project**.
- The Reference is in an **Active** Lifecycle State.
- You must be the Owner of the Project Reference. You, however, do not need to be the Owner of the other References that you are bundling.

**The system is currently designed to bundle References *generated* from a particular Program or Project into a Reference Project. There are cases when a User would want to include a Protocol to provide guidance for how the data were collected. However, unless the Protocol was developed specifically for that Project, it is simply a guide and not a product. In the future, the system will allow the User to link ancillary reference materials to each Project. Yes, we know this rule is limiting since it prohibits someone from linking a Project to a Reference because the Project used the Information Resource. For example, a Project relied on a Protocol to provide guidance for how data was collected. In the future, we will offer this ability as yet another way References can be linked to each other (See Section 6.9.5).

See Also

Generates/WasCreatedBy Link (Section 6.9.2)
Reference Lifecycle States (Section 6)
Reference Owners and Viewers (Section 5.3.1)

3.7 Change Reference Type

When necessary, it is possible to change the Reference Type. This will be particularly useful for the following common cases:

- The reference was not identified properly in the Legacy applications
- The Upload Metadata option only supports Generic Dataset and Data Standard
- There was confusion over which Reference Type was most appropriate

Change Reference Type

Warning! Click here to see the risks involved in this operation.

Current type: Brochure

Change to:

In cases when the Reference is linked to another Reference, it will not be possible to change the Reference Type since it would likely violate the strict rules for linking References. For example, if a Project Reference is linked to a Vector Dataset, thereby indicating that the Project has created the Vector Dataset, it would be illogical to change the Project to an Email.

The ability to change the Reference Type is only possible if:

- You are the Reference Owner
- The Reference is not linked to any other another Reference (except those that are Inactive). This is enforced to preserve the integrity of links among References

In some cases, changing reference types may result in the loss of contact information (e.g., author info). In general, this should not be an issue if you are switching among similar types (e.g., published report to unpublished report), but may be an issue if you are switching between drastically different type (e.g., memo to geodatabase).

Because changing the Reference Type is considered to be a modification of the Reference, if the Reference is Active, it will change to 'In Review'. Therefore, you will need to re-activate the Reference. This rule is implemented because there are different validation requirements (i.e., which fields are required), based on the Reference Type.

See Also

Reference Type Definitions (Section 6.4)
 Reference Owners and Viewers (Section 5.3.1)
 Reference Lifecycle States (Section 6.1)

3.8 Managing Parent Reference Link

For Reference Types that are allowed to have parent links (i.e., Is Part Of), you can manage the appropriate links. This option will appear in the Reference profile when the following conditions are met:

- You own the Reference
- The Reference can have a related parent Reference (e.g., a book can have a parent Book Series)
- The Reference does not currently have any children References that are Active (e.g., the Book does not have any Book Chapters that are Active).

If you click on the hyperlink, you will be taken to a screen to add/remove/change the parent Reference. A simple search screen will help you locate the appropriate Reference.

Search > Profile > Primary Links ? ⚡

Manage Parent Link for Published Report: 2164894
 Current parent: Report Series 2007603

What do you want do do? Change Link to another Parent Reference

Unlink Change Link to Selected Cancel

Depending on whether your Reference has a required or optional parent, you may see different options.

See Also

Is-Part-Of Link (Section 6.9.1)
 Reference Owners and Viewers (Section 5.3.1)

Manage My References »

Search Parameters

References per Page:

Saved Searches:

- Reference Type Groups Exclude
- Search Fields Exclude
- Units Exclude
- Map Exclude
- Reference-Unit Lifecycles Exclude
- Reference Types and Specific Fields Exclude
- Online Resources Exclude
- Reference Visibility Exclude
- Holding Locations Exclude
- Reference Lifecycles Exclude
- Collections Exclude

When you run the search the search criteria panel contracts and the results grid is displayed.

Manage My References »

Expand Panel to Revise Search Definition

Results
Download

Reference Code	Display Citation	Title	Lifecycle
<input type="checkbox"/>	2175529 Carey & Co. Inc. 2000. Historic Structures Report for Harbor Defense Structures. San Francisco...	Historic Structures Report for Harbor Defense Structures	Active
<input type="checkbox"/>	2174617 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Fort Laramie National Historic S...	2009 Image Mosaic Fort Laramie National Historic Site	Active
<input type="checkbox"/>	2174598 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Gateway National Recreation ...	2009 Image Mosaic Gateway National Recreation Area	Active
<input type="checkbox"/>	2174534 Aerial Photography Field Office. 2009. 2009 Image Mosaic Sagamore Hill National Historic Site. G...	2009 Image Mosaic Sagamore Hill National Historic Site	Active
<input type="checkbox"/>	2174532 Aerial Photography Field Office. 2009. 2009 Image Mosaic Thomas Stone National Historic Site. ...	2009 Image Mosaic Thomas Stone National Historic Site	Active
<input type="checkbox"/>	2174530 Aerial Photography Field Office. 2009. 2009 Image Mosaic Fire Island National Seashore. Geospa...	2009 Image Mosaic Fire Island National Seashore	Active
<input type="checkbox"/>	2174529 Aerial Photography Field Office. 2010. 2010 Image Mosaic Cape Cod National Seashore. Geospa...	2010 Image Mosaic Cape Cod National Seashore	Active
<input type="checkbox"/>	2174528 USDA/FSA - Aerial Photography Field Office. 2009. 2009 Image Mosaic Little Bighorn Battlefield ...	2009 Image Mosaic Little Bighorn Battlefield National Monument	Active
<input type="checkbox"/>	2174524 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic George Washington Birthplace ...	2009 Image Mosaic George Washington Birthplace National M...	Active
<input type="checkbox"/>	2174523 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Hubbell Trading Post National H...	2009 Image Mosaic Hubbell Trading Post National Historic Site	Active
<input type="checkbox"/>	2174520 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Colonial National Historical Park...	2009 Image Mosaic Colonial National Historical Park	Active
<input type="checkbox"/>	2174519 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Assateague Island National Se...	2009 Image Mosaic Assateague Island National Seashore	Active
<input type="checkbox"/>	2174514 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Salinas Pueblo Missions Nation...	2009 Image Mosaic Salinas Pueblo Missions National Monument	Active
<input type="checkbox"/>	2174513 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Petrified Forest National Park. ...	2009 Image Mosaic Petrified Forest National Park	Active
<input type="checkbox"/>	2174512 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Chaco Culture National Historic...	2009 Image Mosaic Chaco Culture National Historical Park	Active
<input type="checkbox"/>	2174511 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic El Malpais National Monument. ...	2009 Image Mosaic El Malpais National Monument	Active
<input type="checkbox"/>	2174509 USDA/FSA - Aerial Photography Field Office. 2009 Image Mosaic Bandelier National Monument. ...	2009 Image Mosaic Bandelier National Monument	Active

Page 1 of 7
Selected: 0 Displaying results 1 - 50 of 301

Manage Lifecycle State Manage Permissions

You will see a list of References, up to 10,000. At the bottom right is the count of References. If you wish to manage lifecycle states (e.g., Activate 1 or more References) or Ownership you can select one or more References and then click on one of the two buttons.

See Also

Reference Owners and Viewers (Section 5.3.1)
 Reference-Unit Links (Section 8)
 Reference Lifecycle States (Section 6)

4.1.1 Permissions Batch Management

The Ownership page allows you batch manage Owners and Viewers of the selected References you selected.. Management applies to the select References as well as **all** related Holding Locations and Comments that you own.

The screenshot shows a web interface titled "Transfer/Add/Remove Permissions for Reference". It features three main sections for managing permissions:

- Transfer Ownership:** Shows "Transfer Ownership From: bfrakes@nps.gov" and a "To Owner:" dropdown menu with the placeholder text "Start typing a user name...". A "Transfer Ownership" button is located to the right.
- Add User:** Features an "Add User:" dropdown menu with the placeholder text "Start typing a user name...". Below it are two buttons: "Add As Viewer" and "Add As Owner".
- Remove User:** Features a "Remove User:" dropdown menu with the placeholder text "Start typing a user name...". Below it are two buttons: "Remove As Viewer" and "Remove As Owner".

A "Close" button is positioned at the bottom right of the interface.

You have three options for managing ownership.

First, you can transfer Ownership from yourself to someone else. Following the transfer, you will no longer own any of the References as well as associated Holding Locations and Comments.

Second, you can add someone as an Owner or Viewer.

- Since Owner only applies to References and Comments, adding a viewer will not apply to Holding Locations.
- If you add someone as Owner and they are already Owner of a Reference, the request will be ignored.
- If you add someone as Owner and they are already Owner of a Reference, the request will be ignored.

Third, you can remove someone as Owner or Viewer

- Since Owner only applies to References and Comments, removing a viewer will not apply to Holding Locations.
- If you remove someone as Owner and they are not an Owner of a Reference, the request will be ignored.

- If you add remove someone as Owner and they are already a Viewer, the request will be ignored.
- If you remove yourself as Owner and you are the only Owner, the request will be ignored

In all cases, a new Owner/Viewer is added by typing the first few letters of the Active Directory name and then clicking the "Add Owner".

See Also

Reference Owners and Viewers (Section 5.3.1)

4.1.2 Lifecycle State Batch Management

You can batch manage the lifecycle of the selected References.



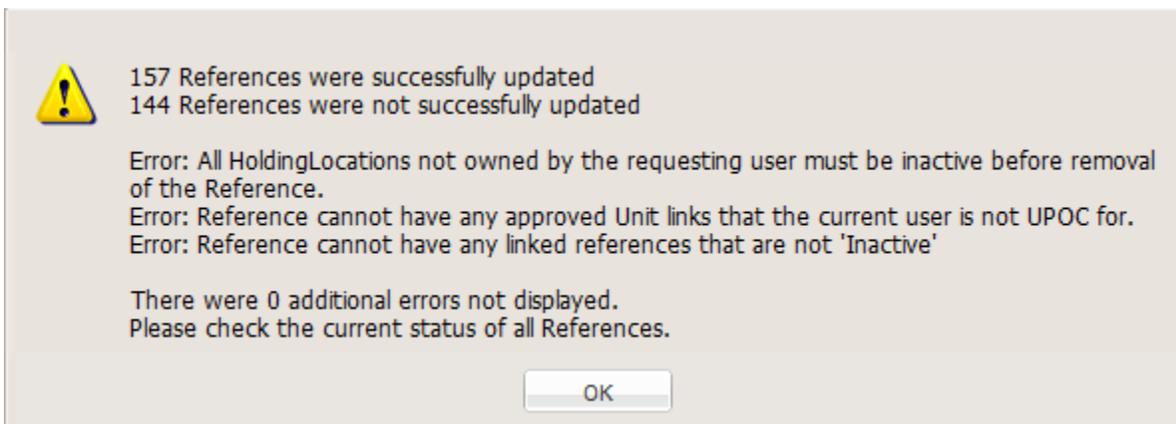
Set the Lifecycle State to...

Active
 In Review
 Quarantined
 Inactive

Cancel Submit

When attempting to change lifecycle in batch, you should be aware of the following:

- Applying the same lifecycle state to a Reference (e.g., Activating an already active Reference) will change the date of when the Reference was last edited
- Any failed attempt to change the lifecycle state for a Reference will not affect the processing of others. For example, if you attempt to inactivate 50 References and inactivation fails for the first Reference, the Data Store will still attempt to inactivate the other 49.
- Any failures to change the lifecycle state are noted in the status pop-up.



 157 References were successfully updated
144 References were not successfully updated

Error: All HoldingLocations not owned by the requesting user must be inactive before removal of the Reference.
Error: Reference cannot have any approved Unit links that the current user is not UPOC for.
Error: Reference cannot have any linked references that are not 'Inactive'

There were 0 additional errors not displayed.
Please check the current status of all References.

OK

4.2 Manage My Holding Locations

This section lets you search for Holding Locations that you Own and therefore may edit. Currently you have the ability to search for all holding locations you own (default) or filter your results by the Holding Location lifecycle state(s) and/or Holding Location Type(s).



Manage My Holding Locations

Search for My Holding Locations by Lifecycle State and/or Holding Location Type

Edit Individual Holding Locations from Results Grid

Search Definition

Filter by Holding Lifecycle States:
(Drag&Drop)

Legacy	Active
Inactive	Draft
InReview	
Quarantined	

Filter by Holding Location Type:
(Drag&Drop)

Physical	DigitalFile
ExternalResource	
CrossReference	

When you run a search, you will see a grid displaying all of the Holding Locations meeting the search criteria in the Search Definition Panel.

Manage My Holding Locations

Search for My Holding Locations by Lifecycle State and/or Holding Location Type

Edit Individual Holding Locations from Results Grid

Expand Panel to Revise Search Definition

Results

Reference Code	Reference Display Citation	Code	Display Citation	Lifecycle State
2166189	Visty J. 2005. sdsfds. Unpublished Re...	420284	Digital File: VectorData.zip	Active
2166166	Northern Colorado Plateau Network, In...	420266	Digital File: archgeodata.zip	Active
2166166	Northern Colorado Plateau Network, In...	420265	Digital File: archveg_large.pdf	Active
2166166	Northern Colorado Plateau Network, In...	420264	Digital File: archveg.pdf	Active
2166166	Northern Colorado Plateau Network, In...	420263	Digital File: metaarchspatial.htm	Active
2166165	Northern Colorado Plateau Network, In...	420262	Digital File: aa_matrix.xls	Active
2166165	Northern Colorado Plateau Network, In...	420261	Digital File: archveg.pdf	Active

Displaying 1 - 58 of 58

Reference Code

Reference Display Citation

Code

Display Citation

Description

Type

Lifecycle State

Holding Location Owners

Reference Owners

Format

Last Accessed

Location

Unit Code

Name

Size

System

System Code

Visibility

Downloadability

[NRPC Intranet](#) [NRPC SharePoint](#) [NRPC Internet](#)

In addition to attributes about the Holding Locations, you see some of the Reference Information. By default, only a few fields are shown. Please note that a number of fields can be turned on:

Other Notes:

- Clicking on the Display Citation of the Holding Location will take you to an edit session for that respective Holding Location (Section 3.5.1)
- Clicking on the Display Citation of the Reference will take you to the Reference Profile (Section 2.4)

See Also

Holding Location Types and Attributes (Section 7.2)
 Reference Owners and Viewers (Section 5.3.1)

4.3 Saved Searches

You can manage saved searches you own.

Portal > Home > IRMA Applications > Data Store > Manage > My Saved Searches

Manage My Saved Searches »

Results			
Saved Search Title	NRInfo Saved Search Name Url		
Climate Database	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/4#Climate%20Database	Delete	
I&M Climate Inventories	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/27#I&M%20Climate%20Inve...	Delete	
I&M Air Quality Data Inventory	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/28#I&M%20Air%20Quality%...	Delete	
I&M Air Quality Related Values Invent...	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/29#I&M%20Air%20Quality%...	Delete	
I&M Vegetation Inventories	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/30#I&M%20Vegetation%20I...	Delete	
I&M Soil Inventories	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/31#I&M%20Soil%20Inventories	Delete	
I&M Geologic Inventories	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/32#I&M%20Geologic%20Inva...	Delete	
I&M Base Cartography Inventory (BCI)	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/33#I&M%20Base%20Cartog...	Delete	
All I&M Inventories	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/34#All%20I&M%20Inventories	Delete	
Baseline Water Quality Reports	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/35#Baseline%20Water%20...	Delete	
Baseline Water Quality Reports	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/36#Baseline%20Water%20...	Delete	
I&M Water Body Location and Classif...	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/37#I&M%20Water%20Body...	Delete	
WRD Dockets	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/38#WRD%20Dockets	Delete	
All I&M Report Series	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/39#All%20I&M%20Report%...	Delete	
I&M Baseline Water Quality Data Inve...	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/43#I&M%20Baseline%20Wa...	Delete	
CHIC Inventory & Monitoring	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/24#CHIC%20Inventory%20&...	Delete	
Geospatial Data	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/71#Geospatial%20Data	Delete	
ROMO Unguluts	https://inp2300fcvdenab.nps.doi.net/App/Reference/Search/81#ROMO%20Unguluts	Delete	

To edit the name of a saved search, click on the title.



If you click on the search URL, you will run the search.

Selecting the delete option will completely delete saved search (it will not affect any of the References meeting the search criteria). Be aware that other users will no longer be able to use a saved search that you delete.

See Also

Saved Your Searches (Section 2.5)

4.4 UPOC Management

4.4.1 UPOC Assignment

The UPOC Management Page allows you, if you are UPOC, to manage the list of UPOCs for your park. There is no restriction on the number of UPOCs that a Unit can have. You can also remove yourself as UPOC as long as you first name another UPOC to take your place.

Manage UPOC Assignment >>

UPOC Search

Select Unit: WBI [v] [Clear] [Search]

Add/Remove UPOCs for

UPOC Results	
Code ^	Remove
BFrakes@nps.gov	Remove

User Search: Start typing a user name... [v] [Add Selected UPOC] [Done]

If you are unsure of which Units you are UPOC for, please note that the search list is limited to those Units for which you are UPOC.

See Also

Unit Steward/Unit Point of Contact (Section 5.2.3)

4.4.2 UPOC Approval

Anyone who is UPOC can approve or deny Reference-Unit links for their respective Unit. To search for References to approve or deny, you must first select a Unit for which you are UPOC. In addition to selecting a Unit, you can filter as needed using the criteria from the advanced search:

UPOC Unit Link Approval »



Approve/Deny Reference-Unit Link Search

References per Page:

- UPOC Unit Exclude
- Reference Type Groups Exclude
- Search Fields Exclude
- Map Exclude
- Reference-Unit Lifecycles Exclude
- Reference Types and Specific Fields Exclude
- Online Resources Exclude
- Reference Visibility Exclude
- Holding Locations Exclude
- Reference Lifecycles Exclude
- Collections Exclude

Following a search, you will see a set of References meeting your search criteria. From this list, you can approve or deny the Reference-Unit link. You can optionally defer a decision by leaving both blank. Changes are not made until you click on the Commit Button. If you need more information about a specific Reference, you can always click on the Display Citation to see the complete Reference Profile (Section 2.2.4).

UPOC Unit Link Approval »

Approve/Deny Reference-Unit Links

Approve	Deny	Title	Display Citation ^	Current Status
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Eastern...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Greater...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Mid-Atl...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, National...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, North C...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Northea...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Northea...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and climate inventory, National Park Service, Pacific I...	Davey CA and Others. 2006. Weather and climate inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Souther...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Upper ...	Davey CA and Others. 2006. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Appala...	Davey CA and Others. 2007. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Arctic ...	Davey CA and Others. 2007. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and climate inventory, National Park Service, Chihuah...	Davey CA and Others. 2007. Weather and climate inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Cumber...	Davey CA and Others. 2007. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Great L...	Davey CA and Others. 2007. Weather and Climate Inventory, National Park Service, ...	Pending
<input type="checkbox"/>	<input type="checkbox"/>	Weather and Climate Inventory, National Park Service, Gulf Co...	Davey CA and Others. 2007. Weather and Climate Inventory, National Park Service, ...	Pending

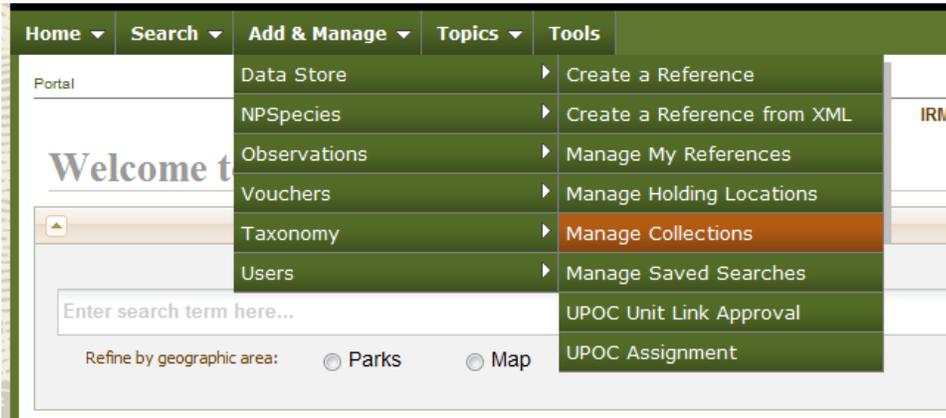
Displaying results 1 - 50 of 55

See Also

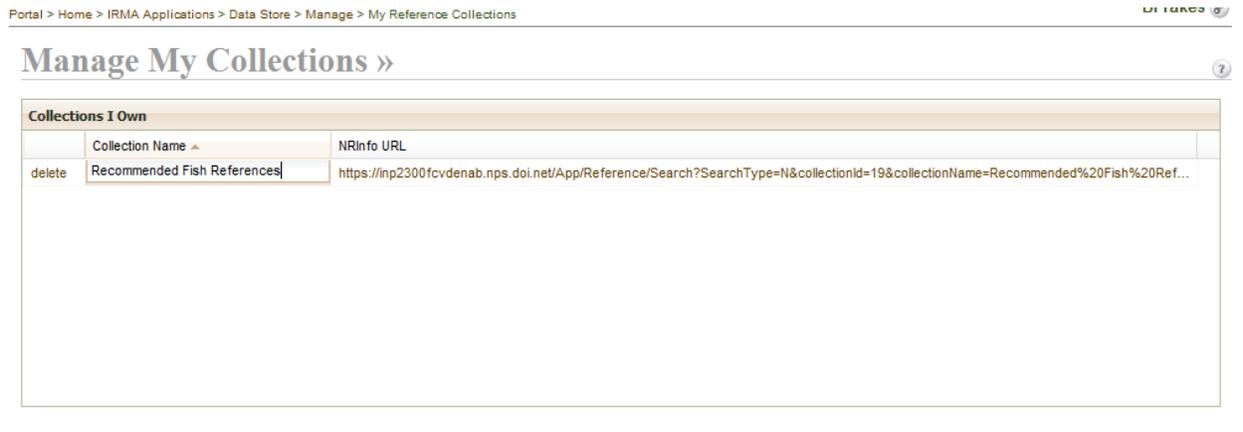
- Unit Steward/Unit Point of Contact (Section 5.2.3)
- Reference-Unit Links (Section 8)
- Reference Profile (Section 2.2.4)

4.5 Collections

If you wish to manage the name of your Reference Collection or completely remove a Reference Collection, you will need to go to the 'Add & Management' section.



From here you can manage Reference Collections you Own.



You can rename your collection by selecting a particular collection name or remove the collection by clicking on the 'delete' option.

5 Permissions and Accessing Information

The Data Store has a very robust means for controlling access to information. The following sections describe:

- Visibility/Downloadability – Reference has different levels of visibility that are automatically handled as you manage your references.
- System-Level Roles – Anyone using the Data Store will automatically be given one or more system level roles. Based on their role, they will be granted access to information based on its visibility
- Record-Specific Roles–In addition to one or more system-level roles, a User may inherit record-specific roles. As the name implies, these roles give permission to access information on a record-by-by basis above and beyond the permissions granted by the system-level roles.

5.1 Visibility/Downloadability

5.1.1 Levels of Visibility

The Data Store recognizes three levels of visibility/downloadability*, which apply to all References, Holding Locations and Comments:

- Public – Accessible/downloadable to the any anonymous person, including the general public
- Internal - Accessible/downloadable to any individual who has an NPS Active Directory account and is logged on to a NPS computer.
- Restricted – Accessible/downloadable only to a select group individuals. Most often these individuals are the record Owners or designated viewers.

References, Holding Locations, and Comments can only have a single value for visibility, although the visibility may change through time.

*Yes, we know downloadability is not a real word; however, it does accurately represent what is possible.

5.1.2 How Visibility is Automatically Calculated

When determining who may view/access information, Reference makes the optimistic assumption that, unless there is a need to restrict something, all References and associated holding locations should be available to the public. There are, however, a number of reasons why there is a need to filter information from the public or all of the NPS. In general, these reasons fall into the following categories:

- The Information Resource describes sensitive information
- The Information Resource is proprietary
- The Information Resource is of questionable quality
- The Information Resource is for general use and is not park-specific
- The Reference is not ready for prime-time, is a duplicate, or is deleted

These five factors were used to guide the development of visibility/access in Reference through the development of objective rules based on how a Reference was attributed.

Simple Explanation

This simple explanation covers 99.5% of all References.

First, it is assumed that all Reference, Holding Locations and Digital Files have a visibility of Public. The following describe cases where this is not true.

A Reference has a visibility of Internal if it

- Has Lifecycle State is Legacy or InReview, OR
- Describes Sensitive Information, OR
- Describes Proprietary Information, OR

- Describes Poor Information, OR
- Is Not linked to any NPS Unit or all Denied

A Reference has a visibility of Restricted if it

- Has a Lifecycle State of Draft, Quarantined or Inactive

A Holding Location has a visibility of Internal if

- The Reference has a visibility of Internal, OR
- The Holding Location Lifecycle State is Legacy or InReview

A Holding Location has a visibility of Restricted if

- The Reference has a visibility of Restricted, OR
- The Holding Location has a Lifecycle State of Draft, Quarantined, or Inactive

The ability to Download a Digital File is Internal if

- The Holding Location has a visibility of Internal, OR
- It contains Operationally Sensitive Information, OR
- It contains proprietary information, but there is permission to distribute

The ability to download a Digital File is Restricted if

- The Holding Location visibility is Restricted
- It contains sensitive information (e.g., T&E Locations)
- It contains proprietary information with no permission to distribute

Detailed Explanation

This section describes the precise logic for determining visibility. To accommodate legacy Data Store references, which were all public, there are two distinct cases for how visibility is calculated.

CASE #1: Unmodified Legacy Data Store Reference

For all unmodified legacy Data Store References, the following logic will apply:

Object Visibility/Downloadability	Category	Value	Automatic Visibility
Reference Visibility	Data Store Reference	Reference In Legacy Lifecycle State	PUBLIC
Holding Location Visibility	Data Store Reference	Reference and Holding Location In Legacy Lifecycle State	PUBLIC
File Downloadability	Data Store Reference	Reference and Holding Location In Legacy Lifecycle State	PUBLIC

Thus, any Reference was migrated from the Data Store and has not been modified in any way will be public. Once modified, this case no longer applies.

CASE #2: All Other References

If a Reference is anything other than a unmodified legacy Data Store Reference, the following logic will apply. Each row shows that, if the condition is met, how the visibility would be affected. For example, if the Information Resource is marked as being

sensitive because it contains information on archeological site, the Reference Visibility can never be more than Internal. If, in addition, the Reference Lifecycle is Draft, the Reference Visibility can never be more than Restricted.

Object Visibility/ Downloadability	Category	Value	Maximum Possible Visibility
Reference Visibility	Information Resource Sensitivity	archeological, caves, commercial value, cultural, endangered, minerals, paleontology, threatened, wells, unknown, operations, Personal Info, Indian Sacred Sites, Security	Internal
	Reference Lifecycle	Legacy, InReview	Internal
	Reference-Unit Link	One or more, all in Legacy or Denied state (no reference-unit links pending or approved)	Internal
	Reference-Unit Link	None	Internal
	Information Resource Quality	Poor	Internal
	Reference Lifecycle	Draft, Quarantined, Inactive	Restricted
	Reference Sensitivity	In NatureBib, the legacy record was attributed as NPS Only	Restricted
Holding Location Visibility	Holding Location Lifecycle State	InReview, Legacy	Internal
	Reference Visibility	Internal	Internal
	Reference Visibility	Restricted	Restricted
	Holding Location Lifecycle State	Draft, Quarantined, Inactive	Restricted
Digital File Downloadability	Holding Location Visibility	Internal	Internal
	Information Resource Proprietary	Internal, NonCommercial, Unknown	Internal
	Information Resource Sensitivity	Operations, Personal Info	Internal
	Holding Location Visibility	Restricted	Restricted
	Information Resource Sensitivity	archeological, caves, commercial value, cultural, endangered, minerals, paleontology, threatened, wells, unknown, Indian Sacred Sites, Security	Restricted
	Information Resource Proprietary	NoDistribute	Restricted
Comment Visibility	Reference Lifecycle	Active, Legacy, InReview	Internal
	Comment Type	Public	Internal
	Reference Lifecycle	Draft, Quarantined, Inactive	Restricted
	Comment Type	Private	Restricted

See Also

Reference Unit Links (Section 8)

Reference Lifecycle States (Section 6.1)

Information Resource Evaluation (Section 6.2)

5.2 System Level Roles and Permissions

The Reference Service recognizes five system-level roles. Roles are a set of connected behaviors, rights and obligations that a particular User may inherit or voluntarily accept in relation to owning, managing, stewarding, administrating and/or viewing References. Which Role a particular User inherits often depends on whether they have been authenticated and, if so, whether they are an NPS employee.

Authentication is the means by which a User identifies and verifies who they are. Users authenticate automatically to the IRMA Portal by having already logged on to an NPS computer (i.e., no need to provide an additional username and password). When not using an NPS computer, authentication will require providing a username and password, which, if the User is associated with the NPS, will be the same authentication as the NPS login.

5.2.1 Guest/Anonymous

The Guest/Anonymous role is given to any User that the NRINFO Portal is unable to identify. The general public or any User who abuses NPS policies when using the NRINFO Portal will be given this role.

5.2.2 NPS

The NPS Role is given to Users who are permanently, temporarily, or seasonally employed by the NPS. NPS employment can include working at a park, network, or other NPS office or can include NPS contractors and Partners. Any User who has an NPS login will be part of this role.

5.2.3 Unit Steward/Unit Point of Contact (UPOC)

UPOC's are trusted data stewards who ensure the quality, integrity, and relevance of information about their NPS Unit in the Data Store. They use personal judgment and assistance from other subject matter experts to approve References containing information specific and relevant to their NPS Unit.

Since NRPC lacks the resources to directly monitor and manage the References for every NPS unit, managing references requires UPOCs who understand the content and value of local reference information. Within the Data Store, the UPOC has a critical role for a variety of reasons.

First, the UPOC provides informal review of information linked to their Unit. Because the NRPC has neither the staff nor the interest in being the "Reference Police," it will be up to the Users of the system to create and effectively steward their own records. The Data Store will provide a number of tools for quality assurance and control (e.g., checking for duplicates, allow other Users to discover and flag errors in References, etc.). However, having the UPOC ensures that there is at least one individual whose purpose is to focus on particular records to ensure they are at a minimal level of integrity.

Second, the UPOC has the final say in what information is relevant for a NPS Unit. There have been problems in the past where individuals have posted erroneous information and linked it to a NPS unit. This has created confusion over whether the information is representative of the Unit. Thus, the UPOC ensures that information linked to their Unit is both about that Unit and is not misleading information. Approval of a link should be guided by the following requirements: (1) The Information Resource explicitly refers to the Unit, as best as the UPOC can reasonably ascertain and (2) The Information Resource contains information that is appropriate and not misleading or misrepresentative, as best as the UPOC can reasonably ascertain. UPOCs should be aware that legal and/or programmatic requirements may prevail over a UPOC's preference as to whether a Reference is linked to a Unit. For instance, a program may have legal requirements to post various types of information about NPS Units. The I&M Inventories, for example, are expected to post the natural resource inventories for each Unit.

Third, the UPOC is the gatekeeper of what information is accessible to the public. NPS staff have a need to manage all types of information, including park-specific datasets and reports as well as non-NPS reference documents and publications. While general references may be useful for internal management decisions (e.g., Birds of Colorado is useful to Colorado parks), the public is more interested in park-specific information. Therefore, for a Reference to be accessed by the public, one criterion is that it must have at least one approved link to an NPS Unit.

Fourth, the UPOC has full knowledge of all information linked to their Unit. The Data Store has very tight security permissions allowing the Reference Owner to lock down access to sensitive and/or proprietary information. Being able to see all information linked to their respective Unit ensures that the UPOC is abreast of all information for their Unit and can help ensure that sensitive information is accessible to and managed by the appropriate individuals.

Fifth, the UPOC ensures that useful information is not removed arbitrarily. If a Reference is linked to a Unit and the UPOC has approved the link, the Reference Owner may not delete the Reference without the UPOC's approval.

Finally, the UPOC is critical for the migration of legacy information. The policies of the two legacy systems resulted in numerous orphaned records that may have been created by someone who is no longer employed by the NPS or never was. These orphaned References, with no clear owner or steward, have never been maintained, improved or removed. For the migration, orphaned records will be adopted by the current UPOC, who will then have responsibility for the stewardship of that Reference (i.e., the UPOC owns the record and is responsible for its management). Fortunately, this is a one-time step that should never need repeating.

The time and expertise required depends on several factors, including the size and type of unit, the number of existing references, the expected rate at which new references are generated, and the unit's objectives for building and using content in

the Data Store. Some UPOCs may choose to automatically approve all references, in effect trading off the time and work required with the quality of content. Another approach is to automatically approve most reference and focus time and effort on reviewing certain types of references, or certain subject areas. Locating and consulting experts to determine whether a Reference is appropriately linked will take time and require access to the appropriate subject matter experts. The most time consuming approach involves thorough review of each Reference and associated Information Resource.

Every Unit within the NPS - whether it is a park, network, regional office, or the national office – is encouraged to designate one or more Unit Point Of Contact(s) or UPOCs. This shared role can be given to any NPS employee, regardless of whether they reside at the Unit. For instance, the Data Manager for the Rocky Mountain Network could share the UPOC role with park staff at one of the Network's respective parks. Likewise, larger Units may designate multiple Users to be UPOCs. Although it will be up to each Unit to define the criteria for selection, the Reference Service will provide recommendations and offer clear guidance to the UPOCs.

The UPOC can delegate the role to other Users. Delegation has the benefit of splitting up the workload, allowing UPOCs to handle specific areas of expertise, and cover for the UPOC if they are on annual leave. Ultimately, it will be up to each Unit and UPOC to determine to whom and why they delegate the role.

See Also

UPOC Approval(Section 8.2)

5.2.4 Administrator

A very small subset of NPS employees will be part of the Administrator role. This role has all available rights and permissions associated with the Reference Service.

5.2.5 Summary of System Level Permissions

The following table summarizes permissions based on the aforementioned roles.

System Level Permission	Anonymous	NPS	UPOC	Administrator
View/Download <u>All Public</u> References, Holding Locations, and Digital Files	Yes	Yes	Yes	Yes
Create a Reference	No	Yes	Yes	Yes
View/Download <u>All Internal</u> References, Holding Locations, and Digital Files	No	Yes	Yes	Yes
View/Download <u>All Restricted</u> References, Holding Locations, and/or Digital Files	No	No	Yes, if linked to their Unit	Yes
Approve/Deny Reference-Unit Link	No	No	Yes	Yes

See Also

Record-Specific Permissions (Section 5.3)

5.3 Record-Specific Permissions

5.3.1 Reference Owners and Viewers

When a User creates a Reference, the User inherits the Reference Owner assignment for that Reference and has complete authority and responsibility for its attribution and stewardship (content, quality, currency, etc.). For example, the Reference Owner is responsible to ensure the Reference describing an associated Information Resource is attributed correctly for sensitivity, proprietary ranking and quality.

The Reference Owner may do the following:

- Edit and delete a Reference.
- Assign Co-Owners or Viewers. Co-Owners will have the same privileges as the Owner and Viewers may view the Reference as well as all holding locations and be able to download any digital file associated with the Reference, regardless of how sensitive or proprietary the Information Resource is.

- Link to a parent Reference. For example, with the 'IsPartOf' relationship, the Owner of the Book Chapter decides which Book it belongs to.
- Bundle Reference in the context of the Project Reference they Own. The Owner of the Project Reference must not be Owner of the other References which are bundled with the Project. Link a Reference to a Unit.

For each Reference, the Reference Owner should designate at least one other Owner. Should the Owner leave the NPS or permanently lose system level rights, having at least one other Reference Owner ensures records are not orphaned (i.e., without an Owner). Reference Owners can be added and removed at any time as long as there is always at least one Reference Owner.

If a Reference Owner changes positions within the NPS, they will still maintain ownership of their respective References because the Reference Owner assignment does not depend on a Unit affiliation. In many cases, however, it will be advantageous to transfer the Reference Owner assignment to the staff replacing them in their previous position.

See Also

- Editing a Reference (
- Is Part Of Link (Section 5.2.3)
- Generates/Was-Created-By Link (Section 5.9.2)
- Reference-Unit Links (Section 8)
- Reference Profile (Section 2.2.4)

5.3.2 Holding Location Owner

When a User creates a Holding Location, the User inherits the Holding Location Owner assignment for that Holding Location (not the Reference) and has complete authority and responsibility for its attribution and stewardship (content, quality, currency, etc.).

See Also

- Holding Locations (Section)
- Add New Holding Location (Section 3.5.1)
- Holdings Panel (Section 2.4.6)

5.3.3 Comment Owner

Note: This functionality is not complete in this release. Current comments were generated on migration from NatureBib.

See Also

- User Comments Panel (Section 2.4.11)
- Comments (Section 9)

5.3.4 Summary of Permissions for Record-Specific Permissions

The following table summarizes record-specific permissions.

System Level Permission	Reference Owner	Reference Viewer	Holding Location Owner
View Reference	Yes	Yes	Yes
View Holding Location	Yes	Yes	Yes
Download Digital File	Yes	Yes	Yes
Edit Reference	Yes	No	No
Edit Holding Location	No	No	Yes

See Also

- Visibility/Downloadability (Section 0)

6 References

6.1 Reference Lifecycle States

A critical attribute that all References have is a lifecycle state.

Lifecycle State	Description
Legacy	The Reference was imported from a legacy application and has not been reviewed as to whether it (1) meets the validation requirements; and (2) uses the same definitions, of the Data Store
Draft	The Reference has been created but has not been validated for required fields.
Active	The Reference has met all validation requirements and is active. Current validation is limited to the completion of required fields.
In Review	The Reference, which was previously Active, is being edited. Activation will required another round of validation.
Quarantined	The Reference Owner has determined there is a gross error in the attribution of the Reference, or a digital file has been uploaded, which might result in the inappropriate access of sensitive and/or proprietary information.
Inactive	The Reference has been set to inactive, which means that it hasn't been removed from the system but is not visible to anyone but the Reference Owners and Viewers.

One critical aspect of the Lifecycle state is that it affects who can view a Reference.

See Also

Visibility/Downloadability (Section 0)

6.2 Information Resource Evaluation

This section describes how an Information Resource can be evaluated for sensitivity, copyright, and quality. These criteria ultimately are important not only for communicating the type of information being managed, but also who should have access to that information (via Visibility).

There is no ability to indicate whether a holding location (e.g., digital file) is sensitive or proprietary. The ability to do this is at the Reference level. This prevents holding locations of the same information resource being attributed differently. For example, if there were two identical copies of a journal article with proprietary information, it would be nonsensical for one to be attributed as non-proprietary while another is attributed as proprietary.

See Also

Visibility/Downloadability (Section 5.1)

6.2.1 Information Resource Proprietary Rank

This rank indicates whether an Information Resource contains information that is copyrighted, has other legal restrictions, paid for access from a third party, and/or the data has recently been collected by a non-NPS Principal Investigator who plans to publish their results in a professional journal. Examples of when an Information Resource may contain proprietary information:

- Data was purchased from a private vendor (e.g., Ikonos Satellite Imagery)
- The article was downloaded from a bibliographic service
- There is any mention of copyright ©
- The information was collected as part of a contract and the contractor plans to publish information in the near future.

The following evaluations are possible:

- **Unknown** – Proprietary status cannot be determined.
- **Copyrighted, Do Not Distribute** – Known to contain copyrighted information but with no permission to distribute.
- **Copyrighted, Distribute Internally** – Known to contain copyrighted information. Permission secured to distribute internally within NPS.
- **Copyrighted, Distribute for Non-Commercial Use** – Known to contain copyrighted information. Public distribution allowed for non-commercial use.
- **Copyrighted, Distribution Permitted**- Known to contain copyrighted information. Permission secured to distribute to the public and use for commercial purposes.
- **Non-Proprietary** - No copyrights or other ownership issues. There are no distribution restrictions based solely on the proprietary evaluation.

6.2.2 Information Resource Sensitivity

The Information Resource describes the specific location of a key natural resource and/or provides information not appropriate for the public. There are two general types of sensitivity.

Operationally Sensitive Information Resources are those that are important to the internal business operations of the NPS, but not appropriate to external audiences. Examples include: locations of social trails, planned construction sites, planned boundary acquisitions, in-holding information, etc.

Legally Sensitive Information Resources contain location-specific information that would create an unreasonable risk of harm, theft, or destruction of a natural or cultural resource or object, including individual organic or inorganic specimens or risk to the health and/or safety of park personnel or the public. Location specific information is defined as a descriptive, graphical or electronic portrayal of a place in such detail that knowledge of the place would permit a person to find the specific place, no matter where it is in the park. For an Information Resource to qualify as having legally sensitive information, all of the following criteria must be met:

- **Internal Resource** - The Information Resource contains information about a resource internal to the NPS.
- **Location-Specific** – There are GPS coordinates indicating the exact location of the resource. It is important to note that only disclosing that a resource is present at a park unit is not considered to be location-specific. Likewise, generalized location data (e.g., cutting off the last digits in UTM coordinates) is also not considered to be location-specific. In extremely rare instances, acknowledgement that a particular resource exists at all in a park may reveal too much location information. For example, if there is only one perennial standing water source in a military park, and that pond provides habitat for a listed frog, then saying the frog occurs in the park would provide sufficient information to locate it. In such cases, NPS employees should seek further guidance, including possibly contacting their FOIA officers and/or the Office of the Solicitor, for assistance in deciding how to evaluate the Information Resource.
- **Not Already Publicly Available** - Information that already is publicly available is not legally sensitive. For instance, the return of condors to the Grand Canyon has been well documented by the press.
- **Resource Type** – The Information Resource contains information pertains to archeological, cave, commercially valuable, cultural, endangered, Indian sacred sites, minerals, security, paleontological, threatened, and/or well resources.

Legal Sensitivity is informed by a number of different laws, Director's Order and/or Executive Orders, including:

- National Parks Omnibus Management Act of 1998, Section 207
- Archaeological Resource Protection Act, 16 U.S.C. § 470hh
- The Federal Cave Resources Protection Act of 1988, 16 U.S.C. 4301 – 4309
- Executive Order No. 13007
- Freedom of Information Act, 5 U.S.C. § 552
- Director's Order #66 (RM-66B)

More of the following non-legal sensitivity fields may be selected. This information is considered to be accessible to the NPS, but not the public:

- **Operations** - Important to the internal business operations of the NPS. This may include information from another originator that is technically not 'sensitive' in nature, but should not be distributed publicly by the National Park Service.
- **Personal Information** - Contains personal information that generally should not be shared with the public, including personal addresses and home phone numbers. **Under no circumstances should you ever include social security numbers, banks account numbers, birth dates, salaries, or any other personal identification that could compromise an individual's identify. This type of information is beyond the scope of what the Data Store is designed to handle. Before posting digital copies, please remove or "black out" this information.**

One or more of the following legal sensitivity fields can also be checked. Both the Reference and the Information Resource will not be visible to the public:

- **Archeological**—Park-specific, location-specific, and non-public information about material remains of past human life or activities which are of archaeological interest (Archaeological Resource Protection Act, 16 U.S.C. § 470hh)
- **Caves** - Park-specific, location-specific, and non-public information about any naturally occurring void, cavity, recess, or system of interconnected passages which occurs beneath the surface of the earth or within a cliff or ledge (including any cave resource therein, but not including any vug, mine, tunnel, aqueduct, or other manmade excavation) and which is large enough to permit an individual to enter, whether or not the entrance is naturally formed or manmade. Such term shall include any natural pit, sinkhole, or other feature which is an extension of the entrance (The Federal Cave Resources Protection Act of 1988 [16 U.S.C. 4301 - 4309]).
- **Commercially Valuable** – Park-specific, location-specific, and non-public information about a resource that has potential for being traded or sold in legal or illegal markets such that unauthorized removal of the resources from a park is likely to occur despite the potential of civil or criminal penalties.
- **Cultural** – Park-specific, location-specific, and non-public information about cultural resources having importance for archeology, history, ethnography, literature, and/or art that are at risk of theft or damage to their physical and/or nonphysical integrity.
- **Endangered** - Park-specific, location-specific, and non-public information about a species or population that has been formally designated as endangered or proposed for such a designation by the US Fish and Wildlife Service, National Marine Fisheries Service or other appropriate state agency
- **Indian Sacred Sites** - Park-specific, location-specific, and non-public information about any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site (Executive Order No. 13007).
- **Minerals** – Park-specific, location-specific, and non-public information about naturally occurring, usually inorganic, discretely bounded crystalline substance with characteristic physical and chemical properties that are due to its atomic arrangement. While a mineral object usually has a characteristic crystal form, it may exhibit a non-crystalline form, such as occurs in opal or obsidian. A mineral object also includes organic substances such as oil and coal, and may contain substances in the category of natural aggregates of materials.
- **Paleontological** - Park-specific, location-specific, and non-public information about any discretely bounded organic remains of a plant or animal, trace of a plant or animal, imprint of a plant or animal, or cast of a plant or animal that has been preserved by natural processes within a geologic context, together with geologic and paleontological data associated with the object.
- **Security** – Park-specific, location-specific, and non-public information about information of concern to local or national security. Examples include buried utilities and dam locations.
- **Threatened**— Park-specific, location-specific, and non-public information about a species or population that has been formally designated as threatened or proposed for such a designation by the US Fish and Wildlife Service, National Marine Fisheries Service or other appropriate state agency (Source).
- **Unknown** – The Information Resource has not been evaluated as to whether it contains sensitive information AND there is a likely chance that it contains sensitive information. The Information Resource is assumed to contain legally sensitive information until otherwise specified.
- **Wells**- Park-specific, location-specific, and non-public information about geological and geophysical information and data concerning wells used for the purpose of withdrawing or injecting water, oil or natural gas

See Also

Visibility/Downloadability (Section 5.1)

6.2.3 Information Resource Quality Rank

This rank describes the quality of information provided within the Information Resource. When assessing quality, you should consider the following:

- Documentation of and adherence to protocols
- Qualifications of observers or data collectors
- Consistency of observers or data collectors (e.g., high staff turnover that could result in variability?)
- Protocols and/or equipment used (e.g., current vs. outdated methods, quality and performance of equipment)
- Volume of data collected and duration of study
- Accuracy, consistency and completeness of data collection and data entry
- Documentation and precision of location data
- Level of synthesis or interpretation of raw data

One of the following evaluations is possible:

- **High** – The Information Resource is not known to be missing or contain misleading information AND adequate documentation on its generation is present. Generally, peer-reviewed materials (e.g., from published journal articles or rigorous monitoring programs) fall into this category.
- **Medium** – The Information Resource is missing some information, but not information that is essential to the correct interpretation. There may have been some internal review of the Information Resource, but not a formal peer-review. The information may be unpublished, but has had some level of informal review.
- **Low** – The Information Resource is missing some information. Documentation on its generation is limited. Correct interpretation is still possible by someone with an advanced knowledge of the topic. The information is from an unpublished source (e.g., unpublished report) and/or has not been reviewed.
- **Poor** – The Information Resource is missing key information or has misleading information that makes effective and correct interpretation extremely difficult. Examples include datasets with little or no documentation.
- **Unknown** – The quality of the Information Resource is unknown and/or unevaluated.

See Also

Visibility/Downloadability (Section 5.1)

6.3 Reference Attribute Definitions

Field	Alias/Label	Definition	Help
Title		The name given to the information resource.	<p>Transcribe the exact title from the resource itself, such as book title page, photograph caption, artist's caption, object name, etc.</p> <p>When no title is found on the resource itself, use the title assigned by the institution holding the resource or the title for the resource as cited in authorized reference sources.</p> <p>If no title is known, best practice is to construct a title, deriving it from the resource itself. Please indicate in the Reference Notes that the title was constructed because an original title was not available. When constructing a title, make it as descriptive as possible, especially for generic categories of resources, such as 'Papers..' or 'Annual reports...'</p> <p>Capitalize only the first letter of the first word of the title and any proper noun(s) in the title.</p> <p>Exception – the name of a conference is considered a corporate entity; as such, a conference name is treated as a proper noun phrase, i.e., all nouns in the conference name (appearing as part of the title) are capitalized.</p> <p>Additional exception – transcribe acronyms exactly as they appear in the title (e.g., ERA)</p> <p>Do not drop words out of the title, do not abbreviate words in the title, do not change the order of terms in the title, do not truncate the title (except in the case of extremely long titles typical of pre-20th century works, in which case it is acceptable to truncate at some point and indicate truncation by adding ellipsis, i.e., (...)).</p>

Field	Alias/Label	Definition	Help
			<p>In general, do not include punctuation when transcribing the title, with the exception of quotes appearing within the title.</p> <p>To set off a subtitle from a title proper, best practice is to use space colon space (substituting original punctuation, e.g., a comma or semicolon not preceded by a space, or space, dash, space)</p> <p>Do not embed any 'style' characteristics in the title, e.g., bolding, italicizing, underlining, use of multiple fonts and/or text size, etc.</p> <p>If the resource is a known 'draft' (per information provided in the preface or via a stamp), but the title page does not include 'draft,' best practice is to enter it (without capitalization) in square brackets at the end of the title [draft].</p> <p>If the work is a standard type of internal report -- e.g., 'plant inventory report' (*) -- and the report category is not contained within the title but would be critical for comprehensive retrieval, it is acceptable to add the report category phrase with no capitalization at the end of the title and within square brackets [plant inventory report].</p> <p>Include initial articles from Title (e.g., A, An, The)</p>
Content Description	Brief Description	A very brief account of the content of the resource.	<p>'Description' may include, but is not limited to, a condensed synopsis of the abstract, table of contents, purpose, reference to a graphical representation of content or a free-text account of the content. Note: Depending on the reference type, there are fields devoted to the complete abstract, table of contents, and purpose.</p> <p>The best practice recommendation for this element is to use full sentences, as 'Brief Description' is often consulted by end-users for assistance in selecting appropriate resources from a set of search results.</p> <p>Descriptive information can be copied or automatically extracted from the item if there is no abstract or other structured description available.</p> <p>Please do not include HTML or other structural tags within the 'Brief Description' element text, that may negatively affect the interoperability of the metadata.</p> <p>Where applicable, use other, more specific elements such as Abstract/Full Description, Table of Contents, to provide further details of the Reference</p>
Abstract_Text	Abstract/Full Description	An account of the content of the resource.	<p>Provides a more detailed description beyond what is possible using the Content Description field.</p> <p>'Abstract' provides a summary of the resource's content. Used when a description of a resource consists of a formal abstract.</p>
Table Of Contents		A list of subunits of the content of the resource	When a description of a resource consists of a list of the contents, 'Table of Contents' can be used to differentiate this list from descriptive text that is written in sentence form. This allows more options for display and indexing.
Date Of Issue	Publication Date/Photo Date/Date Emailed/Date Produced/Date Last Visited/Completion Date	The Date the Information Resource was issued.	
Reference Type		The nature or genre of the content of the resource.	See <R> for list of all types and definitions.
Size		The size or duration of the resource.	See Size (Section 6.5.3)
Contacts		Entities responsible for the creation, production and/or	See Contact Types (Section 6.5.2)

Field	Alias/Label	Definition	Help
		distribution of the Information Resource	
Reference Code		A constant and unique identifier for each Reference	Any Reference created in the Data Store will automatically be given a unique code. References originally created in NatureBib will retain that same code in the Data Store. References originally created in the Data Store will have 1,000,000 added to the code.
Display Citation		A bibliographic reference for the resource. This field is auto-populated and represents and aggregation of information based on the Reference Type.	
Content Begin Date	Date Measure Started/Project Begin Date/Field Date Begin	Starting date the content of the Information Resource refers to, or the temporal characteristic of the intellectual content of the resource.	In all cases, the information contained within the Information Resource should be earlier than the date the Information Resource was published. For example, a report published in 2006 describes fieldwork conducted in July, 2005; the Content Begin Date would be July, 2005. If the Content Begin and End Dates are the same, then only the Content Begin Date need only be completed.
Content End Date	Date Measure Ended/Project End Date/Field Date End	Ending date the content of the Information Resource refers to, or the temporal characteristic of the intellectual content of the resource.	In all cases, the information contained within the Information Resource should be earlier than the date the Information Resource was published. For example, a report published in 2006 describes fieldwork conducted in July, 2005; the Content Begin Date would be July, 2005. If the Content Begin and End Dates are the same, then only the Content Begin Date need only be completed.
Version		Information designating the version of a work.	See Edition
Edition		Information designating the edition or version of a work.	This element is not to be used for versions in the sense of different physical formats (e.g. the PDF version of a textual resource).
Date Range		Any miscellaneous range of dates that further describes the Information Resource, such as the meeting dates for a conference.	
Issue		A single publication of a periodical.	
Location	Publication Location/URL/Location of Presentation	Description of the geographic locations characterized by the Information Resource.	
Meeting Place	Meeting Location	A geographic location that is not described by the Information Resource, but is important to its	

Field	Alias/Label	Definition	Help
		creation, publication and/or organization.	
Miscellaneous Code	Generic Code/Chapter Number/SOP Number/Other Code/Project Code/Language/ Platform/ Standard Number/Report Number	Any type of code that has been used to identify the information resource	
Notes		Other general notes about the Information Resource	
Page Range		Beginning and ending page numbers (in a book chapter, for example). If the information source is one page, the page range will be a single number.	
Purpose		Intent for the creation of the Information Resource	
Volume		A series of issues of a periodical	

6.4 Reference Type Definitions

The section present a list of all Reference Types as well as their definitions. As you can see, you can be very explicit when describing information. However, if you are unsure as to what something is exactly, you are always welcome to assign a more generic category:

- Generic Collection
- Generic Dataset
- Generic Document
- Generic Multimedia

It is important to note that even if you are very explicit in describing information, it should prevent the information from being broadly discoverable. Therefore, most Reference Types fall into one or more Reference Categories, which are used for the Quick Search. Thus, when someone is searching for Datasets, Reference is automatically including all types of datasets, including geodatabases, geospatial datasets, generic datasets, raster datasets, maps, etc.

See Also

Reference Type Groups (Section 6.7)
Quick Search (Section 2.2.1)

Name	Description
Aerial Photograph	Photographs taken off the ground from an elevated position where the camera is not supported by a ground-based structure. The most common platforms for aerial photography include fixed-wing aircraft.

Aerial Photograph Product Type	A series of aerial photographs grouped together based on common characteristics including their scale (e.g., 1-m), format/compression, or spectral signature (e.g., color or IR).
Aerial Photograph Series	A succession of Aerial Photograph Product Types. For example, the NAIP airphoto series has a number of different product types including 1-M color imagery.
Audio Recording	An electrical or mechanical inscription and re-creation of sound waves, such as spoken voice or the ambient environment. The two main classes of sound recording technology are analog recording and digital recording.
Book	A set or collection of written, printed, illustrated, or blank sheets, made of paper, parchment, or other material, usually fastened together by a hinge at one side.
Book Chapter	One of the main divisions of a book. Chapters are generally numbered or titled.
Book Series	A succession of books published with related subjects or authors, similar format, and/or continuous numbering
Brochure	An unbound booklet (that is, without a hard cover or binding), often consisting of a single sheet of paper that is printed on both sides and folded in half, in thirds, or in fourths (called a leaflet). It may also consist of a few pages that are folded in half and stapled at the crease to make a simple book.
Conference Proceeding	Collection of academic papers that are published in the context of an academic conference. They are usually distributed as printed books (or sometimes CDs) either before the conference opens or after the conference has closed. Proceedings contain the contributions made by researchers at the conference. They are the written record of the work that is presented to fellow researchers.
Conference Proceeding Paper	A paper from a Conference Proceeding
Conference Proceeding Series	A succession of conference proceedings published with related subjects, publishers, editors, similar format, and/or continuous numbering
Data Standard	A standard pertaining to the management of data
Dissertation	Document submitted in support of completing a Doctorate Degree that presents the author's research and findings
Docket	Summary of legal documents
Email	A digital message from one person to one or more other persons. An Email consists of two components, the message header, and the message body, which is the email's content.
Generic Dataset	Applied to any type of spatial or tabular data that cannot be more specifically defined (e.g., as a vector dataset)
Generic Document	Any original or official paper that conveys information. Applied to any type of document that cannot be more specifically defined
Generic Multimedia	Any Information Resource pertaining to sound or graphics that is not described by a more specific Reference Type.
Geodatabase	Any database containing more than one related tables, with the tables sharing data. In addition, some of the data types are natively geospatial (i.e., points, lines, and polygons).
Geospatial Dataset	Any dataset that is inherently geospatial in nature.
Journal	A periodical specific to peer-reviewed literature
Journal Article	An article from a peer-reviewed periodical relating to a particular academic discipline.
Journal Issue	Issue
Letter	A hand-written or typed message from one person to another
LIDAR Image	Light Detection And Ranging Image
Map	A visual representation of an area highlighting relationships between objects, regions, and themes
Map Series	A succession of maps published with related subjects or authors, similar format, and/or continuous numbering
Mapbook-Atlas	A digital file, book or other bound resource containing a collection of maps, sometimes with supplementary illustrations and graphic analyses.
Memorandum	A communication that contains directive, advisory, or informative matter
Movie/Video	A collection of still images, that when viewed in series, show motion.
Newsletter	Newsletter Series
Newsletter Article	A single article from a newsletter
Newsletter Issue	A single issue of a newsletter
Newspaper	A periodical publication containing news, information, and advertising
Newspaper Article	An article within a newspaper
Notes	A brief record, especially one written down to aid the memory

Permit	A document that gives formal permission to conduct an activity.
Photograph	A picture captured by an optical device, including cameras, mirrors, lenses, telescopes, microscopes. Images that are orthorectified (processing to geometrically correct it so that the scale of the photograph is uniform and it can be measured as a map) would be treated as a dataset.
Plan	Any type of generic planning document, including monitoring or management plans.
Podcast	A series of digital computer files, usually either digital audio or video, that is released periodically and made available for download by means of web syndication.
Poster	A poster is any piece of printed paper designed to be attached to a wall or vertical surface. Typically posters include both textual and graphic elements, although a poster may be either wholly graphical or wholly text. In some cases, a poster can also be a digital file that would be used for the purpose of printing a hardcopy. Poster formats (i.e. whether it is digital or hardcopy) should be described with separate holding locations.
Presentation	Used for the purpose of showing and explaining the content of a topic to an audience or learner. Most often this is a set of slides that rely on simple text statements and graphics.
Program	An ongoing business process that manages multiple interdependent projects
Project	A planned endeavor, usually with a specific goal and accomplished in several steps or stages that produces a variety of end-products.
Proposal	A document used to apply for sponsored program funds and/or permission to conduct activities that would otherwise not be allowed.
Protocol	A rule, guideline, or document which guides how an activity should be performed.
Protocol Development Summary	A report summarizing progress towards the development of a monitoring protocol.
Published Report	A formally published document which present focused, salient content to a specific audience. Reports are often used to display the result of an experiment, investigation, or inquiry. Often, the publisher is different than the report author.
Raster Dataset	Storage format for managing the location of geospatial information as grids and their associated attribute information. Raster datasets are natively geospatial.
Relational Database	A database containing more than one table, with the tables sharing data.
Report Series	A succession of reports published with related subjects or authors, similar format, and/or continuous numbering.
Resource Guide	A document intended to provide an overview and inventory of natural resources
Satellite Image	Digital image taken of the Earth's surface using electromagnetic sensors on board a fixed-path orbiting or geostationary space-based satellite.
Satellite Image Product Type	A grouping of satellite images based on common characteristics including their scale (e.g., 1-m), format/compression, or spectral signature (e.g., color or IR).
Satellite Image Series	A succession of satellite images published with related subjects, producers, similar format, and/or continuous numbering
Software	Computer programs or code read and written by computers
Sound Pressure Level Measurement	A measure of the local pressure deviation from the ambient (average, or equilibrium) pressure caused by a sound wave. Sound pressure can be measured using a microphone in air and a hydrophone in water.
Specimen	A collected individual, item, or part considered typical of a group, class, or whole
Standard	A document that is established by authority, custom, or general consent as a model or example
Standard Operating Procedure	Detailed written instructions to achieve uniformity of the performance of a specific function
Survey	A method for collecting quantitative information about items in a population
Tabular Dataset	A collection of data. Data is presented in tabular form, where each column represents a particular variable, either as text string or geography (i.e., points, lines and polygons), and each row corresponds to a given member of the data set in question.
Thesis	Document submitted in support of completing a Master's Degree that presents the author's research and findings
Unpublished Report	A piece of information describing an event which given or presented to someone
Vector Dataset	Storage format for managing the location of geospatial information (points, lines and polygons) and their associated attribute information. Vector datasets are natively geospatial.
Web Service	Application programming interfaces (API) or web APIs that are accessed via Hypertext Transfer Protocol and executed on a remote system hosting the requested services
Web Site	A collection of related web pages, images, videos or other digital assets that are addressed relative to a common Uniform Resource Locator (URL),

6.5 Attributes for Each Reference Type

This section describes (1) the [Core Attributes](#), (2) [Contact Types](#), and [Size](#) attributes that are specific to each Reference Type

6.5.1 Core Attributes

This section details which fields are used by each Reference Type, as well as the current label. It is important to note that the same fields are used, regardless of Reference Type and label. For example, almost every Reference makes use of the Title field, even though it may be labeled “Air photo Title” in one case and “Product Type Title” in another.

Name	Keypath	Label	Required?
Aerial Photograph	Title	Airphoto Title	Yes
	ContentDescription	Airphoto Brief Description	No
	ContentBeginDate	Airphoto Content Begin Date	No
	ContentEndDate	Airphoto Content End Date	No
	MiscellaneousCode	Airphoto Generic Code	No
	AbstractText	Airphoto Full Description	No
	Purpose	Airphoto Purpose	No
	Notes	Airphoto Notes	No
	Location	Location Description	No
Aerial Photograph Product Type	Title	Product Type Title	Yes
	ContentDescription	Product Type Description	No
Aerial Photograph Series	Title	Airphoto Series Title	Yes
	ContentDescription	Airphoto Series Description	No
Audio Recording	Title	Title	Yes
	ContentDescription	Brief Description	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
Book	Title	Book Title	Yes
	ContentDescription	Book Brief Description	No
	TableOfContents	Book Table of Contents	No
	DateOfIssue	Book Date Of Publication	No
	Location	Book Place of Publication	No
	Edition	Book Edition	No
	AbstractText	Book Full Description	No
	Notes	Book Notes	No
Book Chapter	Title	Chapter Title	Yes
	ContentDescription	Chapter Brief Description	No

	PageRange	Chapter Page Range	No
	MiscellaneousCode	Chapter Number	No
	AbstractText	Chapter Abstract/Full Description	No
	Notes	Chapter Notes	No
Book Series	Title	Book Series Title	Yes
	ContentDescription	Book Series Description	No
Brochure	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Issued/Published	No
	Notes	Notes	No
Conference Proceeding	Title	Proceeding Title	Yes
	ContentDescription	Proceeding Brief Description	No
	MeetingPlace	Proceeding Meeting Location	No
	DateRange	Date of Meeting	No
	Location	Place Published	No
	DateOfIssue	Proceeding Publication Date	No
	TableOfContents	Proceeding Table of Contents	No
	AbstractText	Proceeding Abstract/Full Description	No
	Notes	Proceeding Notes	No
Conference Proceeding Paper	Title	Paper Title	Yes
	ContentDescription	Paper Brief Description	No
	AbstractText	Paper Official Abstract	No
	PageRange	Paper Page Range	No
	Notes	Paper Notes	No
Conference Proceeding Series	Title	Conference Proceeding Series	Yes
	ContentDescription	Series Description	No
Data Standard	Title	Title	Yes
	ContentDescription	Brief Description	No
	AbstractText	Official Abstract/Full Description	No
	DateOfIssue	Publication Date	No
	Notes	Notes	No
Dissertation	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Completion Date	No
	TableOfContents	Table of Contents	No
	ContentBeginDate	Field Date Begin	No
	ContentEndDate	Field Date End	No
	AbstractText	Abstract/Full Description	No
	Location	City, State	No
	Notes	Notes	No
Docket	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Publication/Issue Date	No

	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	TableOfContents	List of Contents	No
	AbstractText	Full Description	No
	Notes	Notes	No
Email	Title	Title/Subject	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Emailed	No
	Location	Location Emailed From	No
	AbstractText	Full Description	No
	Notes	Notes	No
Generic Dataset	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date of Issue/Release	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	AbstractText	Abstract / Full Description	No
	Purpose	Purpose	No
	Edition	Version	No
	MiscellaneousCode	Generic Code	No
	Location	Place Produced	No
	Notes	Notes	No
Generic Document	Title	Title	Yes
	ContentDescription	Brief Description	No
	AbstractText	Abstract/Full Description	No
	DateOfIssue	Date of Issue	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Notes	Notes	No
	DateRange	Date Range	No
	Edition	Edition/Version	No
	Issue	Issue	No
	Location	Place Produced	No
	MeetingPlace	Meeting Place	No
	MiscellaneousCode	Miscellaneous Code	No
	PageRange	Page Range	No
	TableOfContents	Table Of Contents	No
	Volume	Volume	No
	Generic Multimedia	Title	Title
ContentDescription		Brief Description	No
DateOfIssue		Date Of Issue	No
ContentBeginDate		Content Begin Date	No
ContentEndDate		Content End Date	No

	DateRange	Date Range	No
	AbstractText	Abstract/Full Description	No
	Edition	Edition/Version	No
	Location	Place Produced	No
	Notes	Notes	No
Geodatabase	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Release/ Issue /Version Date	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Edition	Version	No
	TableOfContents	Entity-Relationships	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Location	Location Description	No
	Notes	Notes	No
Geospatial Dataset	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date of Issue/Release	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	AbstractText	Abstract / Full Description	No
	Purpose	Purpose	No
	Edition	Version	No
	MiscellaneousCode	Generic Code	No
	Location	Location Description	No
	Notes	Notes	No
Journal	Title	Journal Title	Yes
	ContentDescription	Journal Purpose / Description	No
Journal Article	Title	Article Title	Yes
	ContentDescription	Article Brief Description	No
	AbstractText	Article Abstract/Full Description	No
	PageRange	Article Page Range	No
	Notes	Article Notes	No
Journal Issue	DateOfIssue	Publication Date	Yes
	Volume	Volume	No
	Issue	Issue	No
	Title	Special Issue Title	No
	ContentDescription	Brief Description	No
	Notes	Notes	No
Letter	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Produced/Written	No

	Location	Location Letter Was Written	No
	AbstractText	Full Description	No
	Notes	Notes	No
LIDAR Image	Title	Title	Yes
	ContentDescription	Brief Description	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	DateOfIssue	Date Issue/Published	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
	Location	Location Description	No
Map	Title	Map Title	Yes
	ContentDescription	Map Brief Description	No
	DateOfIssue	Map Date of Issue	No
	ContentBeginDate	Map Content Begin Date	No
	ContentEndDate	Map Content End Date	No
	Edition	Map Version	No
	Issue	Map Issue ID	No
	AbstractText	Map Full Description	No
	Purpose	Map Purpose	No
	Location	Place Produced	No
	Notes	Map Notes	No
	Map Series	Title	Map Series Title
ContentDescription		Map Series Description	No
Mapbook-Atlas	Title	Title	Yes
	ContentDescription	Description	No
	DateOfIssue	Date Published/Issued	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Edition	Version	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
Memorandum	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Issued	No
	Location	Location	No
	AbstractText	Full Description	No
	Notes	Notes	No
Movie/Video	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Release Date	No

	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	AbstractText	Full Description	No
	Notes	Notes	No
Newsletter	Title	Newsletter Title	Yes
	ContentDescription	Newsletter Brief Description	No
Newsletter Article	Title	Article Title	Yes
	ContentDescription	Article Brief Description	No
	PageRange	Article Page Range	No
	Notes	Article Notes	No
Newsletter Issue	DateOfIssue	Date Issued/Published	Yes
	Volume	Volume	No
	Issue	Issue	No
	Title	Special Issue Title	No
	Notes	Notes	No
Newspaper	Title	Title	Yes
	Location	City/Location Published	Yes
Newspaper Article	Title	Article Title	Yes
	ContentDescription	Article Brief Description	No
	DateOfIssue	Date of Publication	No
	Volume	Volume	No
	Issue	Issue	No
	AbstractText	Full Description	No
	PageRange	Page Range	No
	Notes	Notes	No
Notes	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Created	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Notes	Notes	No
Permit	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date the Permit was Issued	No
	ContentBeginDate	Date Permit Begins	No
	ContentEndDate	Date Permit Ends	No
	Notes	Notes	No
Photograph	Title	Photo Title	Yes
	ContentDescription	Photo Brief Description	No
	DateOfIssue	Photo Date	No
	AbstractText	Photo Full Description	No
	Purpose	Photo Purpose	No
	Notes	Photo Notes	No

Plan	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Issued/Published	No
	AbstractText	Abstract/Full Description	No
	TableOfContents	Table of Contents	No
	Notes	Notes	No
Podcast	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Produced	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Notes	Notes	No
Poster	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Created/Issued	No
	Notes	Notes	No
Presentation	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Presentation Date	No
	Location	Location of Presentation	No
	Notes	Notes	No
Program	Title	Program Title	Yes
	ContentDescription	Program Description	No
	AbstractText	Full Description	No
Project	Title	Project Title	Yes
	ContentDescription	Project Brief Description	No
	ContentBeginDate	Project Begin Date	No
	ContentEndDate	Project End Date	No
	AbstractText	Project Full Description	No
	MiscellaneousCode	Project Code	No
	Notes	Project Notes	No
Proposal	Title	Proposal Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Issued	No
	Location	Location	No
	AbstractText	Full Description	No
	MiscellaneousCode	Proposal Code	No
	Notes	Notes	No
	ContentBeginDate	Field Date Begin	No
	ContentEndDate	Field Date End	No
	Purpose	Purpose	No
Protocol	Title	Title	Yes
	ContentDescription	Brief Description	No

	DateOfIssue	Date Produced / Published	No
	TableOfContents	Table of Contents	No
	MiscellaneousCode	Miscellaneous Code	No
	Notes	Notes	No
Protocol Development Summary	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Produced / Published	No
	TableOfContents	Measures	No
	MiscellaneousCode	Miscellaneous Code	No
	Notes	Notes	No
Published Report	Title	Report Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date of Issue	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Location	Place of Issue	No
	AbstractText	Abstract/Full Description	No
	TableOfContents	Table Of Contents	No
	MiscellaneousCode	Report Number/ID	No
	Edition	Edition	No
	Notes	Notes	No
Raster Dataset	Title	Title	Yes
	ContentDescription	Brief Description	No
	ContentBeginDate	Content Begin Date	No
	DateOfIssue	Date Issued	No
	ContentEndDate	Content End Date	No
	Edition	Version	No
	MiscellaneousCode	Other Code	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
	Location	Location Description	No
Relational Database	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Release/ Issue /Version Date	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Edition	Version	No
	TableOfContents	Entity-Relationships	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
Report Series	Title	Report Series Title	Yes

	ContentDescription	Report Series Description	No
Resource Guide	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Of Issue	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	AbstractText	Full Description	No
	Notes	Notes	No
Satellite Image	Title	Image Title	Yes
	ContentDescription	Image Brief Description	No
	ContentBeginDate	Image Content Begin Date	No
	ContentEndDate	Image Content End Date	No
	MiscellaneousCode	Image Code	No
	DateOfIssue	Image Issue/Release Date	No
	AbstractText	Image Full Description	No
	Purpose	Image Purpose	No
	Notes	Image Notes	No
	Location	Location Description	No
Satellite Image Product Type	Title	Product Type Title	Yes
	ContentDescription	Product Type Description	No
Satellite Image Series	Title	Image Series	Yes
	ContentDescription	Image Series Description	No
Software	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Issued / Published	No
	Edition	Version	No
	MiscellaneousCode	Language / Platform	No
	Notes	Notes	No
Sound Pressure Level Measurement	Title	Title	Yes
	ContentDescription	Brief Description	No
	ContentBeginDate	Date Measure Started	No
	ContentEndDate	Date Measure Ended	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
Specimen	Title	Title/Label	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Collected	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
Standard	Title	Title	Yes
	ContentDescription	Brief Description	No

	DateOfIssue	Publication Date	No	
	AbstractText	Abstract/Full Description	No	
	MiscellaneousCode	Standard Number / Code	No	
	Notes	Notes	No	
Standard Procedure	Operating	Title	Title	Yes
		ContentDescription	Brief Description	No
		DateOfIssue	Date Issued/Published	No
		MiscellaneousCode	SOP Number / Code	No
		AbstractText	Abstract/Full Description	No
		Notes	Notes	No
Survey		Title	Title	Yes
		ContentDescription	Brief Description	No
		ContentBeginDate	Survey Begin Date	No
		ContentEndDate	Survey End Date	No
		TableOfContents	List of Questions	No
		Purpose	Purpose	No
		Notes	Notes	No
Tabular Dataset		Title	Title	Yes
		ContentDescription	Brief Description	No
		DateOfIssue	Date Issued / Released	No
		ContentBeginDate	Content Begin Date	No
		ContentEndDate	Content End Date	No
		TableOfContents	Attributes / Field Names / ERD	No
		AbstractText	Full Description	No
		Purpose	Purpose	No
		Notes	Notes	No
Thesis		Title	Title	Yes
		ContentDescription	Brief Description	No
		DateOfIssue	Date Approved/Completed	No
		ContentBeginDate	Content Begin Date	No
		ContentEndDate	Content End Date	No
		TableOfContents	Table Of Contents	No
		AbstractText	Abstract/Full Description	No
		Location	City, State	No
		Notes	Notes	No
Unpublished Report		Title	Title	Yes
		ContentDescription	Brief Description	No
		DateOfIssue	Date Issued/Produced	No
		ContentBeginDate	Content Begin Date	No
		ContentEndDate	Content End Date	No
		Location	Location	No
		Edition	Edition	No
		AbstractText	Abstract/Full Description	No

	Notes	Notes	No
Vector Dataset	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Published / Released	No
	ContentBeginDate	Content Begin Date	No
	ContentEndDate	Content End Date	No
	Edition	Version	No
	AbstractText	Full Description	No
	Purpose	Purpose	No
	Notes	Notes	No
	Location	Location Description	No
Web Service	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Last Accessed	No
	Location	URL	No
	Purpose	Purpose	No
	Notes	Notes	No
Web Site	Title	Title	Yes
	ContentDescription	Brief Description	No
	DateOfIssue	Date Last Visited	No
	Location	URL	No
	Notes	Notes	No

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See Also

Editing a Reference (Section 3.4)

Searching for Documents and Datasets (Section 0)

6.5.2 Contact Types

Contacts are defined as entities responsible for the creation, production and/or distribution of the Information Resource. Each Reference Type can have one or more defined contacts with their own customized labels.

The following sections provide [contact type definitions](#) and indicate the [contact types specific to each Reference Type](#).

See Also

Editing: Core Tab (Section 3.4.1)

Reference Profile: Core Panel (Section 2.4.3)

Contact Type Definitions

There are three broad categories of contact types which crosswalk to the NPS BibMAPS data exchange standard.

Contact Type	General Definition	Label	Description
Creator	Entity with primary role	Producer	Name of person, institution of agency that is responsible for informally making information resource available to the public

	in creation of intellectual or artistic content of the resource.	Author	Entity directly and primarily involved in creation and preparation of the Information Resource
		Creator	Entity directly and primarily involved in creation and preparation of the Information Resource
		Compiler	Entity directly and primarily involved in creation and preparation of the Information Resource
		Lead	Project lead
Publisher	An entity responsible for making the resource available.	Publisher	Name of person, institution of agency that is responsible for formally making the Information Resource available to the public
		Sponsor	The entity that provided funding or other support to create the Information Resource
		University	A University that produced a thesis or dissertation
		Steward	The party responsible for the maintenance of the Information Resource. Authoritative Data Source.
Contributor	An entity responsible for making contributions to the content of the resource.	Contributor	Entity that directly assisted in the creation of the Information Resource
		Editor	Coordinated compilation and review of the Information Resource
		Recipient	The intended recipient of the Information Resource

Contact Labels for Each Reference Type

Reference Type	Contact Type	Required?
Aerial Photograph	Originator	No
	Publisher	No
	Steward	No
Aerial Photograph Product Type	Publisher	No
Aerial Photograph Series	Publisher	No
Audio Recording	Author	No
Book	Author	No
	Editor	No
	Publisher	No
Book Chapter	Author	No
	Editor	No
Book Series	Publisher	No
Brochure	Author	No
	Publisher	No
Conference Proceeding	Author	No
	Editor	No
	Publisher	No
	Sponsor	No
Conference Proceeding Paper	Author	Yes
	Editor	No
Conference Proceeding Series	Publisher	No
Data Standard	Author	No

	Publisher	No
	Steward	No
Dissertation	Author	No
	University	No
Docket	Compiler	No
	Publisher	No
Email	Author	Yes
	Producer	No
	Recipient	No
Generic Dataset	Author	No
	Contributor	No
	Originator	No
	Producer	No
	Publisher	No
	Steward	No
Generic Document	Author	No
	Editor	No
	Producer	No
	Publisher	No
Generic Multimedia	Author	No
	Producer	No
	Publisher	No
Geodatabase	Contributor	No
	Producer	No
	Publisher	No
	Steward	No
Geospatial Dataset	Author	No
	Contributor	No
	Originator	No
	Producer	No
	Publisher	No
	Steward	No
Journal	Publisher	No
Journal Article	Author	Yes
Journal Issue	Editor	No
Letter	Author	No
	Producer	No
	Recipient	No
LIDAR Image	Producer	No
Map	Author	No
	Editor	No
	Publisher	No
Map Series	Publisher	No

Mapbook-Atlas	Author	No
	Editor	No
	Publisher	No
Memorandum	Author	Yes
	Producer	No
	Recipient	No
Movie/Video	Author	No
	Editor	No
	Publisher	No
Newsletter	Publisher	No
Newsletter Article	Author	No
Newsletter Issue	Editor	No
Newspaper	Publisher	No
Newspaper Article	Author	No
Notes	Author	No
Permit	Author	No
	Recipient	No
Photograph	Author	No
Plan	Author	No
	Editor	No
	Publisher	No
Podcast	Author	No
Poster	Author	No
	Publisher	No
Presentation	Author	No
	Recipient	No
Program	Sponsor	No
Project	Contributor	No
	Lead	No
	Sponsor	No
Proposal	Author	No
	Recipient	No
	Publisher	No
Protocol	Author	No
	Publisher	No
	Steward	No
Protocol Development Summary	Author	No
	Publisher	No
	Steward	No
Published Report	Author	Yes
	Editor	No
	Publisher	No
Raster Dataset	Author	No

	Publisher	No
Relational Database	Author	No
	Contributor	No
	Producer	No
	Steward	No
Report Series	Publisher	No
Resource Guide	Author	No
	Editor	No
	Publisher	No
Satellite Image	Publisher	No
Satellite Image Product Type	Publisher	No
Satellite Image Series	Publisher	No
Software	Author	No
Sound Pressure Level Measurement	Author	No
	Publisher	No
Specimen	Sponsor	No
Standard	Author	No
	Originator	No
	Publisher	No
Standard Operating Procedure	Author	No
	Publisher	No
Survey	Author	No
	Publisher	No
Tabular Dataset	Author	No
	Publisher	No
Thesis	Author	No
	University	No
Unpublished Report	Author	No
	Editor	No
	Producer	No
Vector Dataset	Author	No
	Contributor	No
	Originator	No
	Producer	No
	Publisher	No
	Steward	No
Web Service	Publisher	No
Web Site	Publisher	No

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6.5.3 Size

Size is defined as the size or duration of the Information Resource. Many Information Resources can be characterized by a variety of sizes/measures. Because there are so many and few a standard for any Information Resource, we are providing you the ability to customize this. There are three elements to size: label, value and Units

- Label – What the measure is. For example: Pages, Physical Size, Scale, Resolution, etc.

- Value – The actual value. For example: 122, 6, 2, etc.
- Units – The units required to understand the value. For example: pages, inches, feet, hours, minutes, etc. Use the Units only when appropriate – it is not required.

In summary, combining the Label, Value and Units will produce such meaningful descriptions as:

- Pages: 55 pages
- Scale: 1:50K
- Resolution: 5 megapixels

It is important to note that Size is never required and may not be appropriate for certain Reference Types. For example, it is unlikely that you will have a size for a Program or Project.

See Also

Editing: Core Tab (Section 3.4.1)

Reference Profile: Core Panel (Section 2.4.3)

6.6 Inactivating/Deleting a Reference

In general, References can be inactivated (i.e., soft delete) at any time by the Reference Owner. When an Owner chooses the Inactivate button, only Draft references will be completely purged (hard deleted) from the Data Store. All other References are set to Inactive so they can always be revived by the Owner. After deletion/activation a user who is not the Reference's Owner will not be able to search for or view the Reference.

There are a few cases where a Reference Owner may be prevented from inactivating (soft deleting) their Reference:

- **The Reference Has an Approved Reference-Unit Link** – These References have been evaluated by the UPOC as containing useful information about their park. The UPOC must first deny the Reference-Unit link before the Reference can be removed.
- **The Reference Has Linked References that are Not Inactive**– Dependent References must either be unlinked or set to Inactive before the Reference can be removed. For example, a Reference to a book cannot be deleted if there is a book chapter linked to the book. In addition, if a project is linked to a report, the report cannot be deleted. This restriction regarding linked References applies in one direction only. In the case of the IsPartOf relationship, the parent Reference may not be deleted. In the case of the 'Generates' relationship, the References bundled with the Project may not be deleted.
- **The Reference has Holding Locations that Are Not Inactive**– Holding locations will first need to be set to Inactive before the Reference can be removed.

It is important to note that in cases where a Reference has more than one Owner, any one of the Owners can Inactivate the Reference.

See Also

Reference Unit Links (Section 8)

Reference Lifecycle States (Section 6)

Holding Locations (Section 7.2)

Links Among References (Section 6.9)

6.7 Reference Type Groups

The Data Store is very explicit when describing the type of Information Resource. This has its advantages because it allows Users to search for one specific type of information and also removes ambiguity about what type of information something is.

For common searching, however, needing to specify all relevant Reference Types would be cumbersome and confusing. Therefore, to make it easy, all Reference Types are grouped into more generic categories. It is important to note that some Reference Types fall into one or more categories. For example, an Aerial Photograph can be considered to be both a Dataset and Multimedia. Still other Reference Types may not fall under and of the currently defined groups (e.g., Journal).

See Also

Search Type: Quick (Section 2.2.1)

- Generic Document - Applied to any type of document that cannot be more specifically defined
- Generic Dataset - that cannot be more specifically defined (e.g., as a vector dataset)
- Generic Multimedia - Any Information Resource that is not described by a more specific Reference Type.

Reference Type Group	Group Definition	Associated Reference Types
Datasets	Any information resource whose primary means of conveying information is through the presentation of tabular information geospatially	AerialPhotograph
		AudioRecording
		GenericDataset
		Geodatabase
		GeospatialDataset
		LIDARImage
		Map
		Mapbook-Atlas
		Photograph
		RasterDataset
		RelationalDatabase
		SatelliteImage
		SoundPressureLevelMeasure
		Specimen
		Survey
Documents	Any information resource whose primary means of conveying information is through the presentation of textual information	Book
		BookChapter
		Brochure
		ConferenceProceedingPaper
		DataStandard
		Dissertation
		Docket
		Email
		GenericDocument
		JournalArticle
		Letter
		Map

		Mapbook-Atlas
		Memorandum
		NewsletterArticle
		NewsletterIssue
		NewspaperArticle
		Notes
		Permit
		Plan
		Proposal
		Protocol
		PublishedReport
		ResourceGuide
		Standard
		StandardOperatingProcedure
		Thesis
		UnpublishedReport
Geospatial Data	Any information resource whose primary means of conveying information is through the presentation of tabular information that can be interpreted and displayed geospatially	AerialPhotograph
		Geodatabase
		GeospatialDataset
		MapService
		RasterDataset
		SatelliteImage
		VectorDataset
Multimedia	Any information resource whose primary means of conveying information is through the use of sound or graphics	AerialPhotograph
		AudioRecording
		GenericMultimedia
		Map
		Mapbook-Atlas
		Movie/Video
		Photograph
		Podcast
		Poster
		Presentation
		SatelliteImage
Projects	[Same as Reference Type Definition]	Project
Web Resources	Any information resource whose	WebService

	primary means of conveying information is through the use of the internet	WebSite
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6.8 Reference Geospatial Attributes

Bounding areas are represented in decimal degrees of latitude and longitude. For latitude, values in the northern hemisphere are positive. For longitude, values in the western hemisphere are negative. Thus, the bounding box for Great Sand Dunes NPP, located in Colorado, would have an approximate bounding box of 37.63 to 37.98 North and 105.80 to -105.35 West.

The spatial bounding area defines the geographic relevance of the information resource. A Reference can have one or more bounding areas to represent any location. For example, a project that inventoried vegetation may have occurred in three separate regions of the park. In this case, it would be very easy to create three different bounding boxes.

Please note the following:

- A Reference may have a bounding box that overlaps a NPS Unit without containing information explicitly about the Unit. For example, a book titled "Birds of Colorado" would have a bounding box for the entire state of Colorado and overlap the Colorado parks, but may not contain information explicitly about any one of those Units.
- If a Reference is linked to a Unit, it should have a bounding area that intersects the Unit. In other words, it would not make sense to have a report linked to Rocky Mountain National Park (ROMO) but then have a bounding area located in South Carolina.
- When defining a bounding area, please be aware of accidentally disclosing the location of sensitive information. For example, if you are describing a report about cave entrances, we strongly recommend against having anything more detailed than a bounding box for the entire park.

See Also

Reference Unit Links (Section 8)
Search Type: Advanced (Section 2.2.2)

6.8.1 Creating

Bounding boxes can be added during the creation of a Reference or during an edit session if you are the Reference Owner.

You will first see the entire map of the United States. To zoom into the area you wish to define, select **Shift** and draw a box to zoom. You may need to repeat this step a few times to zoom into the appropriate area.

For each bounding box, you will need to give it a descriptive label. If it is for the Unit as a whole, we recommend typing "Bounding Box for <Unit>". Otherwise, use a label that is descriptive and unique.

Please note that it is not critical to define absolutely precise bounding areas. These bounding areas are meant as a search tool.

See Also

Create a Reference Using a Form (Section 2.5)
Unit Links and Geospatial Attributes Panel (Section 2.4.8)
Reference Owners and Viewers (Section 5.3.1)
Search Type: Advanced (Section 2.2.2)

6.8.2 Editing

Bounding boxes can be edited during an edit session if you are the Reference Owner.

See Also

Create a Reference Using a Form (Section 2.5)
Unit Links and Geospatial Attributes Panel (Section 2.4.8)

Reference Owners and Viewers (Section 5.3.1)
 Search Type: Advanced (Section 2.2.2)

6.9 Links Among References

The Data Store will ultimately support a number of ways that References can be related to each other. These include:

- Is a New Version Of/Is An Older Version Of – A newer version of an information resource exists.
- Cross-References/Is Cross-Referenced By – The information resource cross-references one or more other references
- Is a Duplicate Of/ Has a Duplicate – This reference is duplicative of another reference describing the same information resource.

Currently, however, there are three types of links: 'IsPartOf', 'Generates', and within a 'Collection', which are described below. We also provide recommendations on how to address some of these relationships until the functionality is formally integrated into the Data Store.

6.9.1 Is-Part-Of Link

By definition, this link is used when the identity of a reference (aka child reference) is completely dependent on another reference (aka parent reference). The most common example is a book chapter and book. Within the Data Store, the reference for the book chapter is distinct from the reference for the book. While separate records, the identity of the book chapter is completely dependent on knowing information about the book. Because this type of link among reference is so common, it is known as a primary link among References and will be described using the concept of child, parent, and grandparent.

There are a number of two-level hierarchies:

Child Reference	Parent Reference
Map	Map Series
Newspaper Article	Newspaper (required)
Project	Program
Published Report	Report Series
Standard Operating Procedure	Protocol

There are also a few cases with three-levels:

Child Reference	Parent Reference	Grandparent Reference
Newsletter Article	Newsletter Issue (required)	Newsletter
Aerial Photograph	Aerial Photograph Product Type	Aerial Photograph Series
Book Chapter	Book (required)	Book Series
Conference Proceeding Paper	Conference Proceeding	Conference Proceeding Series
Journal Article	Journal Issue (required)	Journal (required)
Satellite Image	Satellite Image Product Type	Satellite Image Series

The purposes for implementing the primary links among children and parent References are fourfold. First, it helps prevent duplication of data entry. For example, if a user wishes to create a book chapter and the book already exists, they needn't re-enter all of the information about the book. Second, it will help minimize the creation of duplicate records since it will be very easy to see where children already exist for a Reference. Third, allows for greater ease of updating references. If a Journal has a misspelling in the title, changes will automatically be updated to all of the children. Fourth, it allows for a suite of rich attribution while maintaining a simpler system behind the scenes. Users will ultimately realize faster performance and more robust

searching capabilities. Finally, establishing this hierarchy provides a simple way for users to browse for information. When someone selects a program, for example the Vegetation Mapping Program, they will see all of the individual projects that are part of that program.

See Also

Managing Parent Reference Links (Section 3.8)
Reference Owners and Viewers (Section 5.3.1)

6.9.2 Generates/Was-Created-By Link

The Generates/Was-Created-By link always involves a Project Reference Type. A Project Reference Type, when linked to another Reference, indicates that the project generated the Information Resource. Currently, the following Reference Types can be generated by a Project:

Aerial Photograph
Audio Recording
Book
Book Chapter
Brochure
Conference Proceeding Paper
Dissertation
Docket
Email
Generic Dataset
Generic Document
Generic Multimedia
Geodatabase
Geospatial Dataset
Journal Article
Letter
Map
Mapbook-Atlas
Map Service
Memorandum
Movie/Video
Notes
Permit
Photograph
Plan
Podcast
Poster
Proposal
Presentation

Program
Protocol
Protocol Development Summary
Published Report
Raster Dataset
Relational Database
Software
Specimen
Standard Operating Procedure
Survey
Tabular Dataset
Thesis
Unpublished Report
Vector Dataset
Web Service

It is important to note that an Information Resource (and hence it's Reference) can only be generated by one project.

See Also

Link Project to Reference (Section 3.6)

6.9.3 Collections

Users may want to associate References together for any number of arbitrary reasons. Examples include 'My Favorite References About Elk', 'Recommended Further Reading About Chronic Wasting Disease', 'National Level Datasets', etc.

General Rules

Here are the general business rules about Collections:

- Any User can define one or more Collections
- There is no limit to the number of References within a collection although the number of References returned in the quick and advanced search is still limited to 2000.
There is no limit on the number of collections associated with a Reference

Creating and Editing

You can create a collection at any time from the Quick or Advanced Search by clicking on the 'Create or Update Collection' panel below the search results. Likewise, you can add and remove References from any collection.

Results					Download
Reference Code	Type	Display Citation	Title	File Count	
<input type="checkbox"/>	605356	Published Report	Author unknown. 1959. 1958 field investigations, Denali and Vee Canyon dam s...	1958 field investigations, Denali and Vee Canyon ...	0
<input checked="" type="checkbox"/>	3151	Published Report	Andryk T. 1984. 1984 Fall waterfowl survey of the Chequamegon Bay-Kakago...	1984 Fall waterfowl survey of the Chequamegon ...	0
<input type="checkbox"/>	3183	Published Report	Alaska Department of Fish and Game. 1984. 1984 Yukon area salmon report. Al...	1984 Yukon area salmon report	0
<input checked="" type="checkbox"/>	551688	Book	Alaska Department of Fish and Game. 1985. 1985 Yukon area salmon report. Al...	1985 Yukon area salmon report	0
<input checked="" type="checkbox"/>	551685	Published Report	Barton LH. 1986. 1986 Toklat River Fall Chum Salmon Surveys Memorandum fro...	1986 Toklat River Fall Chum Salmon Surveys Mem...	0
<input type="checkbox"/>	3396	Published Report	Anderson DG. 1988. 1988 fish trapping in the South Slough of the Redwood Cr...	1988 fish trapping in the South Slough of the Red...	0
<input type="checkbox"/>	338744	Published Report	Blackfeet Indian Reservation. 1988. 1988-89 fish and wildlife annual regulatio...	1988-89 fish and wildlife annual regulations	0
<input type="checkbox"/>	661415	Unpublished Report	Arizona Game and Fish Department. 1989. 1989 Peregrine falcon survey of the ...	1989 Peregrine falcon survey of the Arizona Strip...	0
<input type="checkbox"/>	649546	Unpublished Report	Arizona Game and Fish Department. 1989. 1989 Peregrine Falcon Survey of the ...	1989 Peregrine Falcon Survey of the Arizona Stri...	0
<input checked="" type="checkbox"/>	3522	Published Report	Arnold DA, St. Pierre R. 1989. 1989 progress report: Restoration of American s...	1989 progress report: Restoration of American s...	0
<input type="checkbox"/>	583339	Published Report	Bente PJ. 1991. 1991 PEFA survey. US Fish and Wildlife Service, Endangered S...	1991 PEFA survey	0
<input type="checkbox"/>	550233	Published Report	Author unknown. 1983. 1992 - 1993 subsistence taking of fish and wildlife reg...	1992 - 1993 subsistence taking of fish and wildlif...	0
<input type="checkbox"/>	652123	Unpublished Report	Beatty GL. 1992. 1992 Arizona bald eagle winter count. Arizona Game and Fish...	1992 Arizona bald eagle winter count	0
<input type="checkbox"/>	583800	Published Report	Bente PJ. 1995. 1995 Peregrine Falcon survey summary (Unpublished table). Al...	1995 Peregrine Falcon survey summary (Unpublis...	0
<input type="checkbox"/>	4102	Published Report	Chaney S. 1996. 1995 progress Report to National Parks Foundation National Fi...	1995 progress Report to National Parks Foundatio...	0
<input type="checkbox"/>	616442	Published Report	Author unknown. 1996. 1995-1996 Study Final Report.. US Fish and Wildlife Ser...	1995-1996 Study Final Report.	0
<input type="checkbox"/>	600162	Published Report	Alaska Department of Fish and Game. 1997. 1996 Deer hunter summary statisti...	1996 Deer hunter summary statistics, August 199...	0

Page 1 of 40 Selected: 11 Displaying results 1 - 50 of 2000

Create Or Update Collection

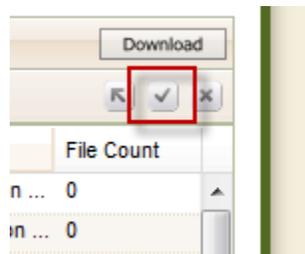
Select or Enter Collection Name:

Collection Actions

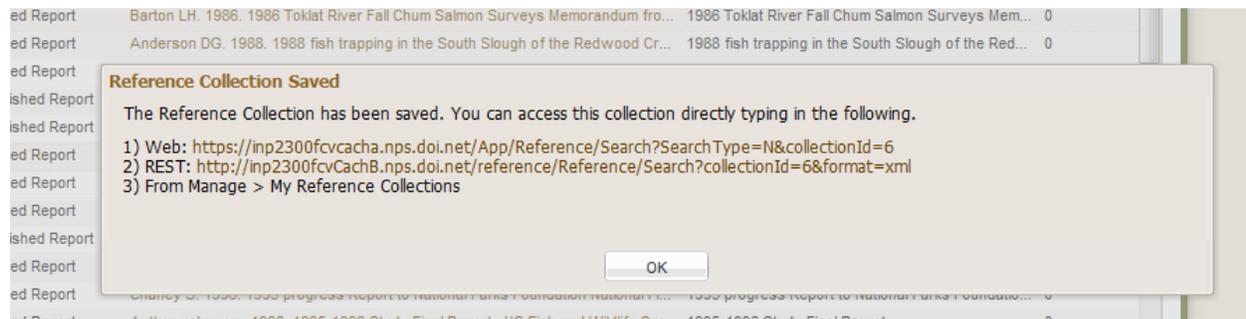
Add To Collection Remove From Collection

When you expand the panel, you will notice that an extra column appears in your search results that allows you to select one or more References to add to (or alternatively remove from) a collection. If you want to select multiple References, you have a couple of options:

1. Selectively check the boxes as you move between pages
2. Select all References on a page by check on the box at the top of the first column
3. Select all References (on all pages) by checking the check box in the upper right section of the search results.



Once you save a collection, you are given directions on how to access it.



6.9.4 Is a New Version Of/Is An Older Version Of

There are many cases where there is a newer version of a dataset or document. In many cases, it is still important to preserve the older version, even if it will not be used as often as the most recent. Thus, it is important that all be discoverable and accessible, however, any user should always be pointed to the most recent version. Perfect examples include park boundaries, annual status reports, protocols and standard operating procedures.

Because versioning is not functional in Reference, we recommend the following best practices as a short-term solution. If you follow these guidelines, we will do everything possible to ensure that, when the functionality is added, your work is automatically preserved.

- In the “Brief Description” field of the newest version, specifically include the phrase “This is a new version of.... [Reference Code - #####]”. For example, a newer version of a standard operating procedure might read as “This is a new version of the network vegetation collection SOP [Reference Code – 1233]”
- In the “Brief Description” field of the older version, specifically include the phrase “A newer version of.... [Reference Code - #####]”. For example, a newer version of a standard operating procedure might read as “A newer version of this SOP has also been posted to NRINFO [Reference Code – 1234] – please refer to this for any future vegetation sampling work”
- Append this text to the title of the older versions ‘(Older Version)’. For example ‘DENA Park Boundary (Older Version).’
- A Reference can only be a new version of one other reference
- A Reference can only have a single newer version
- There should not be any circular versioning (e.g., ‘A’ is a newer version of ‘B’; ‘B’ is a newer version of ‘C’; and ‘C’ is a newer version of ‘A’)

6.9.5 Cross-References/Is Cross-Referenced By

There are many cases where you may want to refer to one or more other references. For instance, a report may cross-reference other articles in the “List of References”. A protocol might cross-reference multiple standard operating procedures. Finally, creation of a dataset may have involved using one or more other datasets.

Because cross-referencing is currently not functional in Reference, we recommend the following best practices as a short-term solution. If you follow these guidelines, we will do everything possible to ensure that, when the functionality is added, your work is automatically preserved.

- In the “Notes” field of the Reference doing the cross-referencing, include the phrase “....cross-references the following [Reference Codes: #####; #####,#####,...]....” For example, a report cross-referencing a few other documents might read as “This report cross-references the following [Reference Codes - 123,1231,523423,56345] because they were used as background material in the creation of the report.”
- Do not attempt to show the “Is Cross-Referenced By” relationship in those multiple References. You’ll kill yourself attempting that.
- There must be a comma delimiter between two or more Reference Codes
- A Reference may cross-reference one or more other References
- A Reference may be cross-referenced by one or more other References

6.9.6 Is Duplicate of/Has Duplicates

Both legacy systems, particularly NatureBib, were riddled with duplicate References for the same information resource. Likewise, because the Data Store is used by many, there will always be the risk of creating duplicate References, even with the most robust duplicate detection algorithms. Therefore, there is indeed a need to address duplicates in a consistent manner.

Because duplicate resolution is currently not functional in Reference, we recommend the following best practices as a short-term solution. If you follow these guidelines, we will do everything possible to ensure that, when the functionality is added, your work is automatically preserved.

- In the “Brief Description” field of the duplicate reference, specifically include the phrase “This is a duplicate reference of... [Reference Code - #####]”. For example, “This is a duplicate reference of another already entered in the Data Store [Reference Code – 1233]”
- A Reference can only be a duplicate of one other Reference
- There should not be any circular duplicates (e.g., ‘A’ is a duplicate of ‘B’; ‘B’ is a duplicate of ‘C’; and ‘C’ is a duplicate of ‘A’)

See Also

Duplicate Detection and Resolution (Section 22)

6.10 Cloning

Cloning is a useful tool in cases where an existing Reference has attributes so similar to the new one you are creating that it would be faster to create the new Reference by copying over the attributes and then editing. When you clone an existing Reference, the new Reference is identical to the original except for the following:

- You are the Owner
- The Reference lifecycle state is ‘Draft’
- Any Approved Reference Unit links will be set to Pending
- There are no Holding Locations
- There are no comments
- There is no Source XML
- Most related References are not preserved.
 - Project bundles are ignored (i.e., Was-Created-By link)
 - Child References are ignored (i.e., Is-Part-Of link). For example, cloning a Book does not automatically create new book chapters. However, when cloning a book, the link to the book series will be preserved.

Please take care to make the appropriate edits to the new Reference to prevent duplicate records.

See Also

Reference Profile-Clone Option (Section 2.4.1)

Reference Owners and Viewers (Section 5.3.1)

Is-Part-Of Link (Section 6.9.1)

Was-Created-By Link (Section 6.9.2)

7 Holding Locations

7.1 Overview

A Holding Location provides instructions on how the Information Resource can be obtained. In some cases it may be a link to a file, while in other cases it refers to a copy held locally at an office.

Anyone can create a Holding Location for a Reference, regardless of whether they own the Reference. This is allowed because there are many cases where there are multiple copies of an Information Resource at different offices. Requiring that a new Reference be created for each would result in duplicate References and unnecessary work.

When a Holding Location is created, the creator is assigned the Holding Location Owner. The Holding Location Owner has complete authority and responsibility for stewardship of the Holding Information (e.g., content, quality, currency, etc.) and can edit or delete the holding location as needed.

All Holding Locations must refer to a single Reference, but a Reference can have zero or more Holding Locations. For example, in some cases, a large report may be divided into sections (e.g., separating a report from the related appendices). In other cases, the same resource might exist in hardcopy at three separate Units.

7.2 Holding Location Types and Attributes

A Holding Location refers to the location of an Information Resource that is described by a Reference. Holding Locations can describe Information Resources held internal to the Reference Service (via the File Service), external to the Reference Service (e.g., NPS Voyager, NPS Focus), or external to the NPS (e.g., Library of Congress, geospatial nodes, museums, etc.). There are four types of Holding Locations:

Holding Type	Definition
Physical	The Information Resource is held physically at an NPS Unit. The Information Resource may be hardcopy or digital.
Digital	The Information Resource is a digital file that is uploaded to and managed by the Data Store. There is currently a 2 gigabyte size limit for a digital file.
External Resource	The Information Resource resides external to the Data Store and generally external to the NPS. Examples include files located on other government servers (USGS, NOAA), public universities, or other web sites.. With this holding type, there is the expectation that that a file that can be downloaded.
Cross-Reference	A Reference to the Information Resource already exists in another system and the Information isn't directly accessible with a web URL. Use this when it is known system and the file has a unique identifier. Examples of cross References include those for TIC, FOCUS, ANCS+. Use this Holding Type only if one of the other Holding Types does not meet your needs.

All Holding Locations have the following attributes in common:

- Holding Location Owner – One or more individuals who have permission to edit the Holding Location (Section 5.3.2).
- Lifecycle State – Indicates the status of the Holding Location (Section 7)
- Visibility – A calculated field indicating who has access to the Holding Location information (Section 0)

The following table lists all of the attributes associated with each Holding Location Type.

Holding	Field	Definition
Digital	Description*	Ancillary information about the digital file that isn't already covered elsewhere and/or is obvious (e.g., Scanning resolution and Missing pages, etc.)
	File Name	Name of the digital file, including its extension. This field is auto populated based on the name of the file during upload. This field cannot be edited.
	File Path	REST-enabled path to access the digital file

Holding	Field	Definition
	File Format	Description of the file format. This is discerned from the file extension (e.g., .doc). This field cannot be edited.
	File Size	Size of file in bytes
Physical	Description*	Ancillary description of the quality of the information resource (e.g., Water Damage, Missing items, Local digital copy, etc.)
	Unit	NPS Unit where the Information Resource is held
	Location	Specific information on how to locate the Information Resource within the Unit. Example: John Smith's Office, top shelf on right
	System	Use this if the Information Resource is tracked with a local management system (e.g., park copy of Endnote)
	System ID	The unique Record ID in the local system being used.
Cross-Reference	Description*	Ancillary description of the of the Information Resource
	System	The system that is managing the Reference Record. TIC, FOCUS, ANCS+ are recommendations, but the User is not limited to this list.
	System Code	The unique Record ID in the local system being used.
	Unit	If this system is at a NPS Unit, it is possible to specify the NPS Unit.
External	Description*	Description of the external agency/group managing the Information Resource.
	URL	The URL which provides the most direct link to the Information Resource
	Last Accessed	Date the URL was confirmed to be accessible and valid.

*The description field currently fails if you attempt to add XML tags. Please stick to regular text.

See Also

Add/Manage Holding Location (Section 3.5)

7.3 Holding Location Lifecycle States

A critical attribute that all Holding Locations have is a lifecycle state.

Lifecycle State	Description
Legacy	The Holding Location was imported from a legacy application and has not been reviewed as to whether it (1) meets the validation requirements; and (2) uses the same definitions, of the Data Store
Draft	The Holding Location has been created but has not been validated for required fields. Note: This lifecycle state is not being used in the Web Form.
Active	The Holding Location has met all validation requirements and is active. Current validation is limited to the completion of required fields.
In Review	The Holding Location, which was previously Active, has been edited. Activation will required another round of validation.
Quarantined	The Holding Location Owner has determined there is a gross error in the attribution of the Holding Location, or a digital file has been uploaded, which might result in the inappropriate access of sensitive and/or proprietary information.
Inactive	The Holding Location has been deleted by the Holding Location Owner

Lifecycle state is important because it affects who can view a Holding Location.

See Also

Visibility/Downloadability (Section 5.1)

Add/Manage Holding Location (Section 3.5)

7.4 Handling Legacy NatureBib URLs to Files

URL links to legacy NatureBib files will no longer be supported as of December 31, 2012. Therefore, if you have web pages or other documents which point to NatureBib, you should replace them with the newer Data Store URLs. The spreadsheet located here [<http://nrpcsharepoint/irma/Reference%20Application%20Help/NatureBibCrosswalkToIRMADataStore.xlsx>] provides a crosswalk between the two systems.

8 Reference Unit Links

8.1 Criteria

The Reference Owner should link a Reference to a Unit when the Information Resource explicitly refers to the particular Unit. Cases that warrant linking include:

- Description/discussion of the Unit in the Information Resource
- Data/information collected at the Unit or is explicitly about the Unit
- A shapefile or database containing a record of information specific to the Unit
- A satellite image has pixels that overlap the Unit
- The Information Resource was produced by a NPS Unit and therefore represents the mission/purpose of that Unit

Some common cases where linking a Reference to a Unit is not necessarily warranted or appropriate include:

- Mention of the Unit in the “List of References”, “Bibliography”, or “Acknowledgements” section of a document or report
- A quote made by someone working at a Unit, but not in reference to that Unit (e.g., a periodical refers to Bob’s knowledge of LIBI and Bob happens to work at ROMO)
- A general reference document (e.g., Soils of North America) that is used by the Unit for management purposes
- A report that is housed on a shelf located in the Unit
- The extent of a dataset overlaps the park, but the dataset does not have any information specific to the park.
- The bounding box for the satellite image overlaps the Unit, but the satellite image does not have pixels overlapping or representative of the park Unit (e.g., diagonal images and cloud cover).

In addition, both the Reference and the Information Resource should be appropriate. Examples of inappropriate information include:

- Information that is out of scope (e.g., a report from a third grader)
- An incorrectly attributed Reference (e.g., misspellings, inaccurate evaluation of sensitivity, proprietary, or quality rankings, insufficient attribution to clearly identify what the Information Resource is, etc.)
- Duplicate Information – The Reference and/or the Information Resource is a duplicate of information that already exists
- Contradictory Information – The Reference/Information Resource contradicts another Reference/Information Resource which would result in a consumer of the information becoming confused over which source they should use.

See Also

Reference Geospatial Attributes (Section 6.8)

8.2 UPOC Approval

The UPOC has the authority to review and approve/deny any Reference links to their respective Unit. It is up to the UPOC and the Unit they represent, to decide how much time and resources they devote to the review process. At one extreme, some UPOCs may automatically approve all References linked to their Unit and devote negligible time to this duty. Others may automatically approve most and devote time to reviewing a select few. Still other UPOCs may consult an expert to determine whether a Reference is appropriately linked. Finally, some may thoroughly review each Reference and associated Information Resource.

Approving a Reference-Unit link is important for three reasons:

- The Reference can never be discovered by the public (i.e., public visibility) if it does not at least have one pending or approved Unit link. Furthermore, it can only be discovered in the context of those with pending or approved unit links. This, the UPOC can control which information is discoverable for their park unit and, in many cases, strongly influence whether the Reference can be viewed by the public.
- The Reference will never be discovered when searching specifically about the park unit. For example, a denied Reference for ROMO that is about elk will not be discovered when someone searches for elk at ROMO.
- A Reference can never be inactivated (soft deleted). This ensures that information specific to the NPS is never accidentally lost. To inactivate a Reference, the Reference Owner must ask the UPOC to deny the Reference-Unit link.

Approval of a link should be guided by the following criteria:

- The Information Resource explicitly refers to the Unit, as best as the UPOC can reasonably ascertain.
- The Information Resource and/or Reference contain(s) information that is appropriate, as best as the UPOC can reasonably ascertain.

A Reference linked to more than one Unit will require separate approval from each UPOC. However, UPOC approval does not affect approvals by other UPOCs. For instance, a Reference linked to both FLFO and GRSA will require approval by two UPOCs. The UPOC for GRSA may approve this link while the UPOC for FLFO, after reviewing the Reference and Information Resource, determines the Reference and associated Information Resource are not about FLFO and rejects the link.

In rare cases, there may be a legal requirement to post information about a park unit and have it be discoverable to the public. If this is the case, the legal requirement trumps any UPOC preference as to whether it is linked to their park and is therefore automatically approved.

See Also

UPOC Approval (Section 4.4.2)

8.3 Reference-Unit Lifecycle States

There are four possible lifecycle states for a Reference being linked to a Unit. Each state has a different meaning.

Lifecycle	Definition
Legacy (no longer supported)	Was imported from a legacy application and has not been reviewed as to whether it uses the same definitions as the Data Store. Please note that all Legacy records were changed to Pending because it was overly confusing and was not contributing to the overall functionality of the application.
Pending	The UPOC has not reviewed the Reference-Unit link
Approved	The Reference-Unit link was approved by the UPOC
Denied	The Reference-Unit link was not approved by the UPOC

The Reference-Unit lifecycle state is one determinant for the Reference visibility.

See Also

Visibility/Downloadability (Section 0)

9 Reference-Taxa-Unit Links

The Data Store treats taxonomy very much like it handles all other keywords, they are one extra way both to communicate the content of the information resource and also facilitate discovery. On the other hand, unlike simple free-form keywords, there is extra value with the taxa links, especially when associated with a NPS unit. This section provides guidance on when to link a Reference to one or more taxa and when it is appropriate to also associate the NPS unit.

It is appropriate to link a Reference to one or more taxa if the information resource:

- Mentions the taxon somewhere in the body of the text, using the scientific, common name, or taxonomic ID
- Contains a record for the specific taxon using the scientific, common name, or taxonomic ID

For each taxon, you can optionally associate the Unit as well, assuming you have already linked the Reference to the respective Unit. Only specify the Unit if the information resource:

- Unambiguously indicates the taxon was observed within the boundary of the NPS unit
- Contains a record for that taxon whose spatial location is unambiguously within the boundary of the NPS unit

After the Reference has a complete list of taxa keywords associated to units this information may be linked to NPSpecies as evidence of the existence of species within the NPS Unit. See NPSpecies User Manual for linking References to NPSpecies.

10 Comments

Users may have the need to annotate References in a way that does not fit into the normal schema of attribution. In some cases, Users may wish to annotate for their own personal use, including an annotated bibliography. In other cases, it may be important to document discussions among Users regarding the editing of a Reference.

The Data Store currently does not support the creation or editing of comments. Comments which are presently visible are associated with legacy information migrated from NatureBib.

See Also

User Comments Panel (Section 2.4.11)

11 Arbitration

The Data Store does not intend to be a top-down, formally-monitored, and controlled system (i.e., there is no Reference “cop”). In extremely rare instances, however, Users may not be able to resolve disputes and will need to rely on the guidance of individuals who specialize in various topic areas, including T&E species, FOIA, legal and policy requirements for information quality, unit-specific policies, taxonomy, etc.

As much as possible, we ask that you coordinate with each other any issues you have regarding the posting of all References, holding Locations, and the Approval/Denial of Reference-Unit Links.

In cases where a non-Owner and Owner disagree on changes to a Reference, we will provide guidance for arbitration, including recommended experts in particular topical areas (e.g., FOIA), to provide assistance. The ability to refer to system-level experts ensures that legal requirements and NPS policies ultimately prevail in how information is managed and accessed.

12 Metadata Standards

There are three primary standards that the Data Store will ensure that it meets or exceeds: NPS BibMAPS, Dublin Core, and ISO 19115 Metadata Standard/North American Profile.

Developers of the Data Store actively collaborated with representatives of the NPS Office of the Chief Information Officer (OCIO) to develop NPS Bibliographic Metadata Application Profile Standards (BibMAPS). As such, the Data Store will ensure that it complies with the current and future defined standards.

With a few notable exceptions, Data Store corresponds almost directly with BibMAPS. The similarities and differences among BibMAPS and the Data Store can be summarized by the following points:

- Most often, Reference has more stringent requirements than BibMAPS. For example, Display Citation is Mandatory for Reference while only mandatory if applicable for BibMAPS.
- There are only two cases where BibMAPS has more stringent requirements than the Data Store (Location and Edition).
- In most cases there is a 1-to-1 relationship between a BibMAPS element and the corresponding Reference element. Differences in field definitions are negligible or non-existent.
- There is one case where multiple BibMap elements correspond to a single Reference element. Most notable is where five BibMAPS Date elements would all map to the DateOfIssue element from Reference.
- There is one case where multiple BibMap elements correspond to multiple Reference elements. This occurs primarily when describing the format, extent and medium of the information resource being described.

The [Dublin Core](#) Metadata Element Set identifies 15 elements that are essential to describing an information resource. In all cases, the Data Store meets the minimum requirements defined by Dublin Core, with the exception of Language (this will be supported in the next iteration of Reference).

The [ISO19115:2003 Metadata Standard/North American Profile](#) (ISO19115:2003/NAP) is the North American customization of an international standard.

In all cases, the Data Store meets the minimum requirements defined by ISO19115:2003/NAP. The differences among ISO19115:2003/NAP and the Data Store can be summarized by the following points:

- Reference currently has optional some of the mandatory if applicable fields. Notable examples are spatial resolution and spatial representation.
- While the Data Store will not manage all of the ISO19115:2003/NAP mandatory if applicable fields directly, it is capable of managing and vending a source XML metadata record which does meet all of the ISO standards.

The following table lists each of the BibMap and ISO19115:2003-NAP key elements and also indicates which fields in Reference correspond to the standard.

BibMAPS Element	Dublin Core	ISO19115:2003-NAP	Reference Element	Comments
Title (M)	Title(M)	Title (M)	Title (M)	
Alternative Title (R)			[Not Supported]	
Creator (MA)	Creator (M)		Creator (MA)	
Contributor (MA)	Contributor (M)		Contributor (MA)	
Publisher (MA)	Publisher (M)		Publisher (MA)	
Subject (MA)	Subject(M)	Topic Category (R)	Subject (MA)	
Description (MA)	Description (M)		Brief Content Description (R)	

BibMAPS Element	Dublin Core	ISO19115:2003-NAP	Reference Element	Comments
Abstract (R)			Abstract/Full Description (R)	
Table of Contents (R)			Table of Contents (RA)	
Date Created (MA)	Date (M)	Reference Date (M)	Date Of Issue (MA)	
Date Valid (O)			Content Begin Date and Content End Date (R)	
Date Available (O)			[Plan to Support]	
Date Modified (O)			[Plan to Support]	
Date Copyrighted (O)			Date Of Issue (MA)	Date of Issue does not get a granular as the BibMAPS standards.
Date Submitted (O)			Date of Issue (MA)	
Date Accepted (O)			Date Of Issue (MA)	
Date Captured (O)			Date Of issue (RA)	
Type (M)	Type(M)		Reference Type (M)	
Format (R)	Format (M)		Format (RA)	
Extent (O)			Size (RA)	
Medium (O)			Holding Location Type (R)	
Identifier (M)	Identifier (M)	Metadata File Identifier (A)	Reference Code (M)	
Bibliographic Citation (MA)			Display Citation (M)	
Source (O)	Source(M)		Holding Location (R)	
Language (MA)	Language(M)	Language (M)	[Plan to Support] MA	
Relation (O)	Relation (M)		LinkType (R)	
IsVersionOf/ (R)			[Plan to Support] (R)	
IsFormatOf (R)		Distribution Format (A)	HoldingType (R)	
HasFormat (R)			Size (R)	
IsReplacedBy/Replaces (R)			[Plan to Support] (R)	
IsPartOf/HasParts			IsPartOf (MA)	
Requires			[Plan to Support] (R)	
References/IsReferencedBy (O)			[Plan to Support] (R)	
Temporal Coverage (MA)			ContentBeginDate (R)	
Spatial Coverage (MA)	Coverage (M)	Geographic location by coordinates (A)	Geography (MA)	
Rights (MA)	Rights(M)		Information Proprietary Rank (M)	Does not currently
Audience (O)			"National Park Service Natural Resources"	This is the audience of
Edition (MA)			Edition (RA) [Plan to Support] (R)	Reference will have robust
Location (MA)			Holding Location (R)	
		Metadata Point of Contact	Reference Owner (M)	
		Metadata Date Stamp (M)	Date Last Edited (M)	
		Responsible Party (A)	Contact.Steward (O)	
		Character Set (A)	"USA"	
		Spatial Resolution (A)	Size (O)	
		Spatial Representation Type (A)	Size (O)	

BibMAPS Element	Dublin Core	ISO19115:2003-NAP	Reference Element	Comments
		Reference System (A)	Size (O)	
		Lineage (A)	[Not Supported]	
		Online Resource (A)	Holdings(O)	

- M – Mandatory
- A – If Applicable
- R – Recommended
- O - Optional

See Also

Rules for Mapping XML to the Data Store (Section 13)

13 Rules for Mapping XML to the Data Store

This section shows the current logic for how an XML metadata record is mapped to the Data Store.

General rules for XML import:

- All date formats must be YYYYMMDD. Using other date formats will cause the mapping to fail.
- Custom XML tags embedded within the standard XML tags will cause the mapping to fail.

The following table applies to these reference types:

- AerialPhotograph:
- GenericDataset
- Geodatabase,
- GeospatialDataset
- RasterDataset,
- SatelliteImage
- VectorDataset

Data Store Field	XML XPath
ReferenceTypeCode	GenericDataset
CodeId	/metadata/NPS_Info/Meta_MID
AbstractTextList	/metadata/idinfo/descript/abstract,/metadata/NPSDATA/Abstract
ContentDescriptionList	/metadata/idinfo/descript/abstract,/metadata/NPSDATA/Abstract
ContentBeginDateList	/metadata/idinfo/timeperd/timeinfo/rngdates/begdate,/metadata/idinfo/timeperd/sngdate/caldate,/metadata/idinfo/timeperd/mdattim/sngdate/caldate[1]
ContentEndDateList	/metadata/idinfo/timeperd/timeinfo/rngdates/enddate,/metadata/idinfo/timeperd/sngdate/caldate,/metadata/idinfo/timeperd/mdattim/sngdate/caldate[n]
Title	/metadata/idinfo/citation/citeinfo/title
DateOfIssue	/metadata/idinfo/citation/citeinfo/pubdate
DateRange1	/metadata/idinfo/timeperd/rngdates/begdate
DateRange2	/metadata/idinfo/timeperd/rngdates/enddate
Edition	/metadata/idinfo/citation/citeinfo/edition
Issue	/metadata/idinfo/citation/citeinfo/issue
Location	/metadata/idinfo/spdom/descgeog
Scale	/metadata/dataqual.lineage.srcinfo.srcscale
SizeAndUnits	/metadata/distinfo/stdorder/digform/diginfo/transize
UpdateFrequencyList	/metadata/idinfo/status/update
KeywordList	/metadata/idinfo/keywords/themekey,/metadata/idinfo/keywords/place/placekey,/metadata/idinfo/keywords/stratum/stratkt,/metadata/idinfo/keywords/temporal/tempkt,/metadata/idinfo/taxonomy/keywtax/taxonkw,/metadata/hps_info/datstore/category
NotesList	/metadata/idinfo/descript/supplinf,/metadata/NPSDATA/Supplinf
PurposeList	/metadata/NPSDATA/Purpose,/metadata/idinfo/descript/purpose
OriginatorContactsList	/metadata/idinfo/citation/citeinfo/origin,/metadata/idinfo/datacred
Contacts	/metadata/idinfo/ptcontac
ContactCorporateName	cntinfo/cntorgp
ContactLastName	cntinfo/cntperp/cntper
ContactAffiliationList	cntinfo/cntorgp/cntper,/cntinfo/cntperp/cntorg
ContactTitleList	cntinfo/cntpos

GeoDataDatumList	/metadata/spref/horizsys/geodetic/horizdn,/metadata/SPDOM/UTMDATUM
GeoDataProjectionList	/metadata/spref/horizsys/planar/mapproj/mapprojn,/metadata/spref/horizsys/coordsysn
GeoDataBoundingBoxEast	/metadata/idinfo/spdom/bounding/eastbc
GeoDataBoundingBoxNorth	/metadata/idinfo/spdom/bounding/northbc
GeoDataBoundingBoxSouth	/metadata/idinfo/spdom/bounding/southbc
GeoDataBoundingBoxWest	/metadata/idinfo/spdom/bounding/westbc
GeoDataCoordinateSystem	/metadata/spref/horizsys/planar/gridsysn
HoldingDescriptionGeneric	/metadata/Digtinfo/resdesc
HoldingDescriptionSpecific	digtinfo/formspec
HoldingName	/metadata/distinfo/stdorder/digform/digtinfo/formspec
HoldingsIterator	/metadata/distinfo/stdorder/digform
HoldingSize	digtinfo/transize
HoldingFormat	digtinfo/formname
HoldingFilePathsIterator	digtopt/onlinopt/computer/networka/networkr
UnitIterator	/metadata/NPS_Info/NPS_Unit
UnitCode	UnitCode
DefaultReferenceLifecycleState	Draft
DefaultHoldingLifecycleState	Draft
DefaultReferenceUnitLifecycleState	Pending
DefaultReferenceProprietaryRank	NonProprietary
UseConstraints	/metadata/idinfo/useconst

The following applies to the reference type of standard:

Data Store Field	XML XPath
CodeId	/metadata/NPS_Info/Meta_MID
AbstractTextList	/metadata/idinfo/descript/abstract,/metadata/NPSDATA/Abstract
ContentDescriptionList	/metadata/NPSDATA/Abstract,/metadata/NPSDATA/Purpose,/metadata/idinfo/descript/abstract,/metadata/idinfo/descript/purpose
ContentBeginDateList	/metadata/idinfo/timeperd/timeinfo/rngdates/begdate,/metadata/idinfo/timeperd/sngdate/caldate,/metadata/idinfo/timeperd/mdattim/sngdate/caldate[1]
ContentEndDateList	/metadata/idinfo/timeperd/timeinfo/rngdates/enddate,/metadata/idinfo/timeperd/sngdate/caldate,/metadata/idinfo/timeperd/mdattim/sngdate/caldate[n]
Title	/metadata/NPSDATA/Title
DateOfIssue	/metadata/statinfo/sdate/sngdate/caldate
DateRange1	/metadata/idinfo/timeperd/rngdates/begdate
DateRange2	/metadata/idinfo/timeperd/rngdates/enddate
Edition	/metadata/idinfo/citation/citeinfo/edition
Issue	/metadata/idinfo/citation/citeinfo/issue
Location	/metadata/idinfo/spdom/descgeog
Scale	/metadata/dataqual/posacc/horizpa/horizpar
SizeAndUnits	/metadata/distinfo/stdorder/digform/digtinfo/transize
UpdateFrequencyList	/metadata/idinfo/status/update,/metadata/NPSDATA/Updatefr
KeywordList	/metadata/Catref/Category,/metadata/Isoref/IsoTheme,/metadata/KeyRef/Keyword_ID
NotesList	/metadata/idinfo/descript/supplinf,/metadata/NPSDATA/Supplinf

PurposeList	/metadata/NPSDATA/Purpose,/metadata/idinfo/descript/purpose
OriginatorContactsList	/metadata/idinfo/citation/citeinfo/origin,/metadata/idinfo/datacred
Contacts	/metadata/idinfo/ptcontac
ContactCorporateName	cntinfo/cntorgp
ContactLastName	cntinfo/cntperp/cntper
ContactAffiliationList	cntinfo/cntorgp/cntper,/cntinfo/cntperp/cntorg
ContactTitleList	cntinfo/cntpos
GeoDataDatumList	/metadata/spref/horizsys/geodetic/horizdn,/metadata/SPDOM/UTMDATUM
GeoDataProjectionList	/metadata/spref/horizsys/planar/mapproj/mapprojn,/metadata/spref/horizsys/coordsysn
GeoDataBoundingBoxEast	/metadata/idinfo/spdom/bounding/eastbc
GeoDataBoundingBoxNorth	/metadata/idinfo/spdom/bounding/northbc
GeoDataBoundingBoxSouth	/metadata/idinfo/spdom/bounding/southbc
GeoDataBoundingBoxWest	/metadata/idinfo/spdom/bounding/westbc
GeoDataCoordinateSystem	/metadata/spref/horizsys/planar/gridsysn
HoldingDescriptionGeneric	/metadata/Digtinfo/resdesc
HoldingDescriptionSpecific	digtinfo/formspec
HoldingName	/metadata/distinfo/stdorder/digform/digtinfo/formspec
HoldingsIterator	/metadata/distinfo/stdorder/digform
HoldingSize	digtinfo/transize
HoldingFormat	digtinfo/formname
HoldingFilePathsIterator	digtinfo/onlineopt/computer/networka/networkr
UnitIterator	/metadata/NPS_Info/NPS_Unit
UnitCode	UnitCode
DefaultReferenceLifecycleState	Draft
DefaultHoldingLifecycleState	Draft
DefaultReferenceUnitLifecycleState	Pending
DefaultReferenceProprietaryRank	NonProprietary
UseConstraints	/metadata/idinfo/useconst

Regardless of Reference Type, if the distribution liability field (i.e., metadata\distinfo\distliab XPATH) is blank, the following will be added:

“The National Park Service shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data and related graphics (i.e., GIF or JPG format files) are not legal documents and are not intended to be used as such. The information contained in these data is dynamic and may change over time. The data are not better than the original sources from which they were derived. It is the responsibility of the data user to use the data appropriately and consistent within the limitations of geospatial data in general and these data in particular. The related graphics are intended to aid the data user in acquiring relevant data; it is not appropriate to use the related graphics as data. The National Park Service gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data. It is strongly recommended that these data are directly acquired from an NPS server and not indirectly through other sources which may have changed the data in some way. Although these data have been processed successfully on computer systems at the National Park Service, no warranty expressed or implied is made regarding the utility of the data on other systems for general or scientific purposes, nor shall the act of distribution

constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data.”

See Also

Reference Attribute Definitions (Section 6.3)

14 Publishing Information via Web Accessible Folders

A number of search engines rely on having information accessible in a web accessible folder where they can crawl and harvest the information for the purpose of their own federating searching. The Data Store supports the ability to post metadata and digital files to a WAF for harvesting by Geospatial One Stop (GOS - <http://gos2.geodata.gov/wps/portal/gos>).

To successfully publish a metadata record and digital file, the following criteria must be met:

- Prior to uploading the XML, you must confirm that the XML is well formed and contains the required metadata fields.
- The Reference must be created by uploading a XML metadata record
- The Reference Type must be any of the data types (e.g., generic dataset, vector dataset, geodatabase, etc.)
- The Reference must have a visibility of Public
- The Holding Location for the digital file must have a visibility of Public

Except for the management of the networkr tags (i.e., Holding Locations) all changes made to the Reference using the web interface **will not** be reflected in the XML being posted to the WAF. Therefore, if you discover that something is incorrect in the XML, you will need to delete the Reference and re-upload the corrected XML.

Any change to the Reference and/or Digital Holding Location which results in a change to its visibility will result in the WAF being updated immediately. For example, deleting a Reference will result in the XML and associated digital files being removed from the WAF.

See Also

Creating a Reference via XML Upload (Section 3.3)
Visibility/Downloadability (Section 0)
Reference Type Groups (Section 6.7)
Rules for Mapping XML to the Data Store (Section 13).

15 Ownership of Legacy Records

In some cases, you may own Reference, Holding Locations and possibly Comments, even though you did not create them. Please refer to either the

NatureBib Migration Logic - <http://nrpcsharepoint/irma/Reference%20Application%20Help/NatureBibMigrationLogic.pdf>

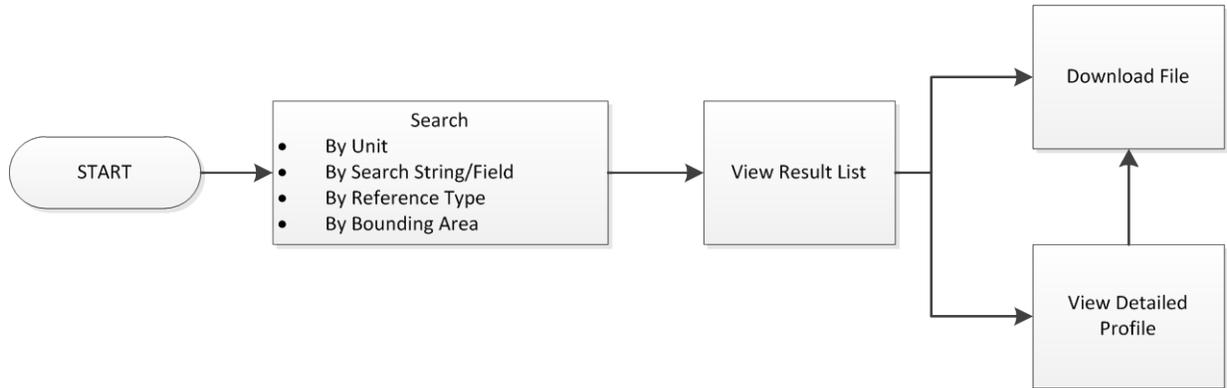
or the

Data Store Migration Logic - http://nrpcsharepoint/irma/Reference%20Application%20Help/Data_Store_Migration_Logic.pdf

If you require ownership, please refer to the [NRInfo Feedback page](#).

16 REST

The Data Store has provides REST operations to support the most common scenario for querying information. This scenario involves a User searching for a list of references based on a combination search criteria. Then, based on the list, the User may want to view more detailed information about that Reference (i.e., its profile). Additionally, the User may wish to download any digital files while viewing the list of References or while viewing the profile.



Please be aware that we are still making minor modifications to the REST interface as we get user feedback. Therefore, if you are developing applications that consume REST services, we strongly recommend that you subscribe to the NRInfo Listserve (<http://webmail.itc.nps.gov/mailman/listinfo/nrinfo>) to be informed of all updates to the REST services. REST changes will only occur during a release and will be documented in this manual.

16.1 Search

16.1.1 Description

This REST call allows any NPS or public user to search for a list of References. Users have the option of specifying two or more arguments.

- Format – The format of the returned results **must** be specified.
- Start Index – Since there are only 300 results returned, User can optionally specify the range of records to return.
- Unit Code(s) – One or more unit codes can optionally be specified.
- Search String – One or more search strings can optionally be specified.
- Search Field – If a search string(s) is/are specified, a single search field can optionally be specified.
- Reference Type – A single Reference Type can optionally be specified.
- Bounding Area – A single bounding area can optionally be specified.
- Collection Id – The ID of a user-defined Reference Collection

The REST Search URI Template is:

```

http://services.nrinfo.nps.gov/Reference/Reference/Search?units={unitCodes}&searchField={searchField}&searchStrings={searchstrings}&type={type}&boundingArea={boundingArea}&format=xml&CollectionId={CollectionId}&startIndex={startIndex}
  
```

Other notes:

- In addition to the format, at least one other search option must be specified.
- Multiple search options are delimited by the ‘&’ character and are intersected together.
- The case of the text is not significant.

- The number of results returned is limited to 300 and sorted in order of Reference Code.
- The order of the parameters is not significant. The two examples below are equivalent and will work:

```
http://services.nrinformatio.nps.gov/Reference/Reference/Search?units=ROMO&searchField=title&searchStrings=elk&format=xml
```

```
http://services.nrinformatio.nps.gov/Reference/Reference/Search?searchField=title&searchStrings=elk&format=xml&units=ROMO
```

16.1.2 Input Parameters

Format Parameter

The Format parameter is required and must be one of: xml, json. When not specified or not one of the supported values a 'Resource does not exist' Error occurs

Start Index Parameter

To ensure robust performance, the maximum number of results that can be returned is 300 for a single REST call. Therefore, to access records beyond the first 300, the startIndex can be used for paging. For example, if there are 750 references that match the search criteria, the user can get References 301-600 by using StartIndex=300 in the URL. To get References 601-750 the startIndex should be set to 601.

Other Notes:

- The startIndex parameter is optional.
- When no startIndex is specified the value of 0 is used.

Example:

```
http://services.nrinformatio.nps.gov/Reference/Reference/Search?units=ROMO&format=xml&StartIndex=300
```

Unit Codes Search Parameter

Specifying Unit Codes allow you to get information specifically about the NPS Unit. The Unit codes parameter is optional. When more than one Unit Code is specified they must be delimited by a semi-colon. All Units are intersected together.

Examples:

- To search for references linked to Arches NP and the Vegetation Map Inventory:

```
http://services.nrinformatio.nps.gov/Reference/Reference/Search?units=ARCH;VMI&format=xml
```

- To search for references linked only to CALA:

```
http://services.nrinformatio.nps.gov/Reference/Reference/Search?units=CALA&format=xml&StartIndex=300
```

Search Strings Search Parameter

The SearchStrings parameter is optional unless a search field is specified (see below). Strings that are composed of multiple words are treated as an exact phrase. When more than one search string is specified they must be delimited by a semi-colon. All search string are intersected together.

Example:

- This call will search records with the phrase 'parks and protected areas'.

```
http://services.nrimf.nps.gov/Reference/Reference/Search?searchStrings=parks and protected areas&format=xml
```

SearchField Search Parameter

- The SearchField parameter is optional and is used together with the SearchStrings parameter.
- When specified, the SearchStrings parameter must also be present. Otherwise the call will return an error.
- Only one value can be specified and must be one of the following:
 - Abstract
 - Contacts
 - ContentDescription
 - DisplayCitation
 - Keyword
 - Title
 - UserCode
 - AllFields – when used, then all fields listed above are searched
- When the value specified is not in the list above, the following error is returned: "The SearchField when specified must be one of the following..."
- When no SearchField parameter is specified then all fields listed above are searched

Examples:

- Searches AbstractText field for moose

```
http://services.nrimf.nps.gov/Reference/Reference/Search?searchField=abstract&searchStrings=moose&format=xml
```

- Searches title field for elk AND moose

```
http://services.nrimf.nps.gov/Reference/Reference/Search?searchField=title&searchStrings=moose&format=xml
```

- Searches all fields above for elk AND habitat

```
http://services.nrimf.nps.gov/Reference/Reference/Search?searchField=allfields&searchStrings=elk;habitat&format=xml
```

- Searches all fields above for elk AND habitat. Since searchField is not specified, allFields is used by default.

```
http://services.nrimf.nps.gov/Reference/Reference/Search?searchStrings=elk;habitat&format=xml
```

Type Search Parameter

- The Type parameter is optional and is used to indicate a reference type.
- Only one type can be specified
- No check is performed to validate the reference type. If the type specified is not a valid type, no references will be returned.
- For Reference types composed of multiple words, the spaces must be removed in the request.

Examples:

- Searches for references whose type is 'Book'

<http://services.nrimf.nps.gov/Reference/Reference/Search?type=Book&format=xml>

- Searches for all Book Chapters

<http://services.nrimf.nps.gov/Reference/Reference/Search?type=BookChapter&format=xml>

BoundingBox Search Parameter

- The BoundingBox parameter is optional and is used to indicate a geographic boundary to search within
- Only one boundingArea can be specified
- The template for boundingArea is boundingArea=LL:-106,39.5;UR:-105.5,40 where LL is the lower left point (longitude, latitude) in decimal degrees and UR is the upper right point (longitude, latitude) in decimal degrees.
- If the template is not used correctly the following error occurs: "Invalid BoundingBox. Format should be boundingArea=LL:-106,39.5;UR:-105.5,40. LL is the lower left point: longitude, latitude. UR is the upper right point: longitude, latitude."

Examples:

- Search for area between 106.39-105.5 degrees West and 39.5-40 degrees North.

<http://services.nrimf.nps.gov/Reference/Reference/Search?&format=xml&boundingArea=LL:-106,39.5;UR:-105.5,40&searchStrings=fossil>

Reference Collection Search Parameter

- A Reference Collection ID parameter is optional and is used to indicate a user-defined Reference Collection (See Section 6.9.3)
- Only one CollectionID can be specified

Examples:

- Search for Reference Collection ID=35.

<http://services.nrimf.nps.gov/Reference/Reference/Search?&format=xml&CollectionId=35>

Include Keywords

If includeKeywords=true is part of the REST URL, keywords will be returned

16.1.3 Output Parameters

For each Reference, it will return the following attributes:

- ContentBeginDate
- ContentBeginDateAccuracy
- ContentDescription
- ContentEndDate
- ContentEndDateAccuracy
- DateOfIssue
- DateOfIssueAccuracy
- DisplayCitation
- Holdings (Zero or more)
 - HoldingDetail
 - Description
 - HoldingCode
 - HoldingType
 - IsDownloadable
 - Location
 - System
 - SystemCode
 - Unit
 - UnitName
 - Visibility
- PrimaryReferenceType
- ReferenceCode
- ReferenceLifecycleState
- Title
- Bounding Boxes (one or more)
 - BBoxName
 - LatMin
 - LatMax
 - LongMin
 - LongMax
- Units
 - Unit
 - Lifecycle State
 - Name
 - UnitCode
- Keywords (if includeKeywords=true)

16.2 Saved Searches

16.2.1 Description

A set of References defined by a saved search (created in the Advanced Search Page) can be retrieved by specifying the unique search ID.

The structure of the saved search REST call is:

```
http://services.nriinfo.nps.gov/reference/reference/SavedSearch?id={}&startIndex={startIndex}&includeKeywords={includeKeywords}&format=xml
```

16.2.2 Input Parameters

ID

Unique Saved Search ID

StartIndex

This argument is optional. When specified will return the references that meet the criteria of the query beginning with the reference at the index specified. When not specified will be set to 0.

IncludeKeywords

This is optional. When set to true, will include the keywords in the search results.

16.2.3 Output Parameters

Information returned is identical to the Reference Search (See Section 16.1.3)

16.2.4 Examples

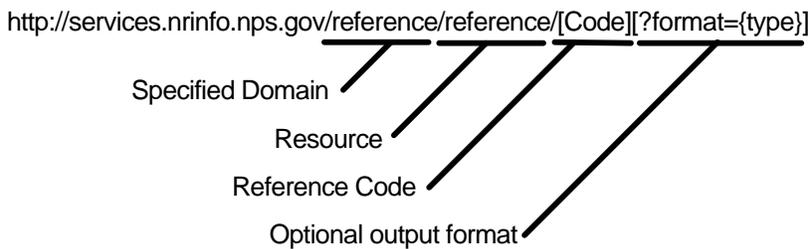
Search for the current administrative boundaries:

<http://services.nrimo.nps.gov/reference/reference/SavedSearch?id=1&format=xml>

16.3 Fetch Reference Profile

16.3.1 Description

This call returns detailed information about a specific Public Reference.



Public References are those that meet all of the following criteria:

- Reference is Active
- Reference does not describe any sensitive Information Resource
- Reference does not describe any proprietary Information Resource where permission to distribute it publicly has not been secured
- Reference has at least one Approved Reference-Unit link by the Unit Point of Contact (UPOC)
- Reference has at least one Digital Holding that is Active

16.3.2 Input Parameters

Reference Code

A single Reference Code

Format

The format parameter defines the manner in which the values are provided in the response message. Valid values include xml and json.

16.3.3 Output Parameters

For each Reference, it will return the following attributes:

- Content Description
- Content Begin Date
- Content Begin Date Accuracy
- Content End Date
- Content End Date Accuracy
- Date Of Issue
- Date Of Issue Accuracy
- Display Citation
- Information Resource Quality
- Reference Code
- Reference Type
- Reference Lifecycle State
- Title
- Units(0 or more)
 - UnitCode
 - LifecycleState
 - Name
- Keywords (0 or more)
- Contacts (0 or more)
 - Contact Type
 - First Name
 - Middle Name
 - Last Name
 - Corporate Author Name
 - Order
- Holdings (Zero or more)
 - HoldingDetail
 - Description
 - HoldingCode
 - HoldingType
 - IsDownloadable
 - Location
 - System
 - SystemCode
 - Unit
 - UnitName
 - Visibility
- RelatedReference
 - BundledReferences
 - BundledReference
 - Reference code
 - DisplayCitation
 - Linktype
 - Siblings
 - DisplayCitation
 - ReferenceCodes
 - LinkType
 - PrimaryRelatedReference
 - ReferenceCode
 - DisplayCitation
 - ParentOrChild
 - LinkType

16.3.4 Examples

- Fetch details about Reference 2124472

`http://services.nrinfo.nps.gov/reference/reference/2124472`

- Fetch details for Reference 664370

`http://services.nrinfo.nps.gov/reference/reference/664370`

- Fetch details about Reference 664370, with an output format of json

`http://services.nrinfo.nps.gov/reference/reference/664370?format=json`

16.4 Fetch Reference List (no longer supported)

While still functioning now, we will no longer support this REST call. See Search (Section 16.1).

17 Advanced Search Logic

17.1 Operators

There are three operators for text:

- Containing – The field contains the word phrase (e.g., Like * phrase * - notice the spaces between the asterisks)
- Exactly Matches – The entire field matches the word phrase (e.g., Like phrase* - no space between asterisk)
- Not Containing – The field does not contain the word phrase (e.g., Not Like * phrase * - notice the spaces between the asterisks)

Please note that no logic operators that can be embedded inside text strings (e.g., fish*, e!%k). Those special characters will be treated literally.

The date operators is used whenever a field is of the date type:

- Exactly On
- Before
- After
- Between'
- To present

You can optionally pick from the date selector or type in a date. The only date validation, however, is to confirm ####/###/. First number between 1-12, second number between 1 -31, and a four digit years.

17.2 Precedence When Specifying Multiple Search Criteria

In sections where a user can specify multiple rows of criteria and when three or more criteria are defined, the logic precedence will be dictated by the order in which the user created those criteria. For example

Statement A AND Statement B OR Statement C

Will be evaluated as

(A AND (B OR C))

So, if a user needs to find all References with “wolf” or “elk” in the title, that contains ‘Jones’ in the contacts (presumably the author), they should select

	Contact Name	▼	containing	▼	Jones	Remove	
AND	▼	Title	▼	containing	▼	wolf	Remove
AND	▼	Title	▼	containing	▼	elk	Remove

The query will be constructed as follows:

```
'Contact' containing 'Jones' AND( 'title' containing 'elk' AND'title' containing 'wolf )
```

To further clarify, imagine that the user selects

	Title	▼	containing	▼	wolf	Remove	
AND	▼	Title	▼	containing	▼	elk	Remove
OR	▼	Title	▼	containing	▼	Jones	Remove

This will be evaluated as

```
'title' containing 'wolf' AND( 'title' containing 'elk' OR 'title' containing 'Jones')
```

Which will mean that the user will get all references containing 'wolf' and 'elk' in the title PLUS all references containing 'wolf' in the title and written by Jones.

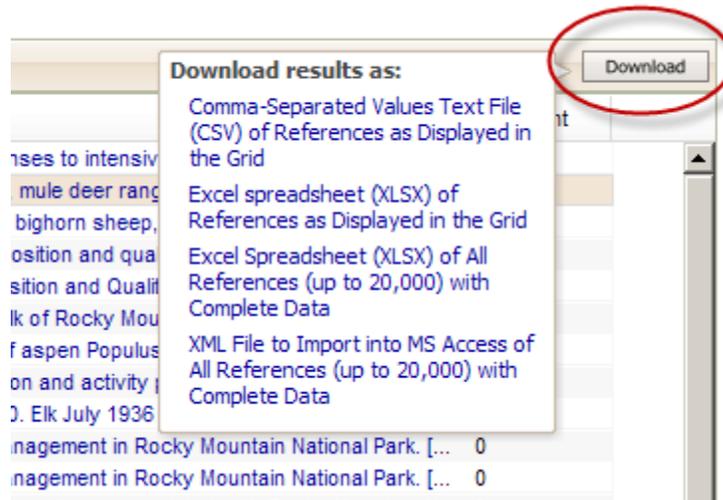
18 Export References to Desktop

You have a number of options to choose from if you wish to export one or more references to your desktop. Your choices include

- Downloading your search results
- Exporting to Endnote
- Connecting Directly and Developing Customized Exports

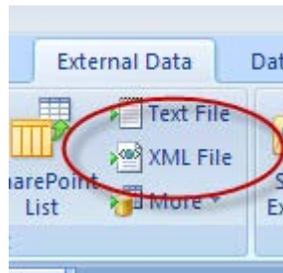
18.1 Download Your Search Results

You can download your search results from the Quick Search, Advanced Search, Manage My Holding Locations, and UPOC Approval pages. In all cases, you will be presented with four options:

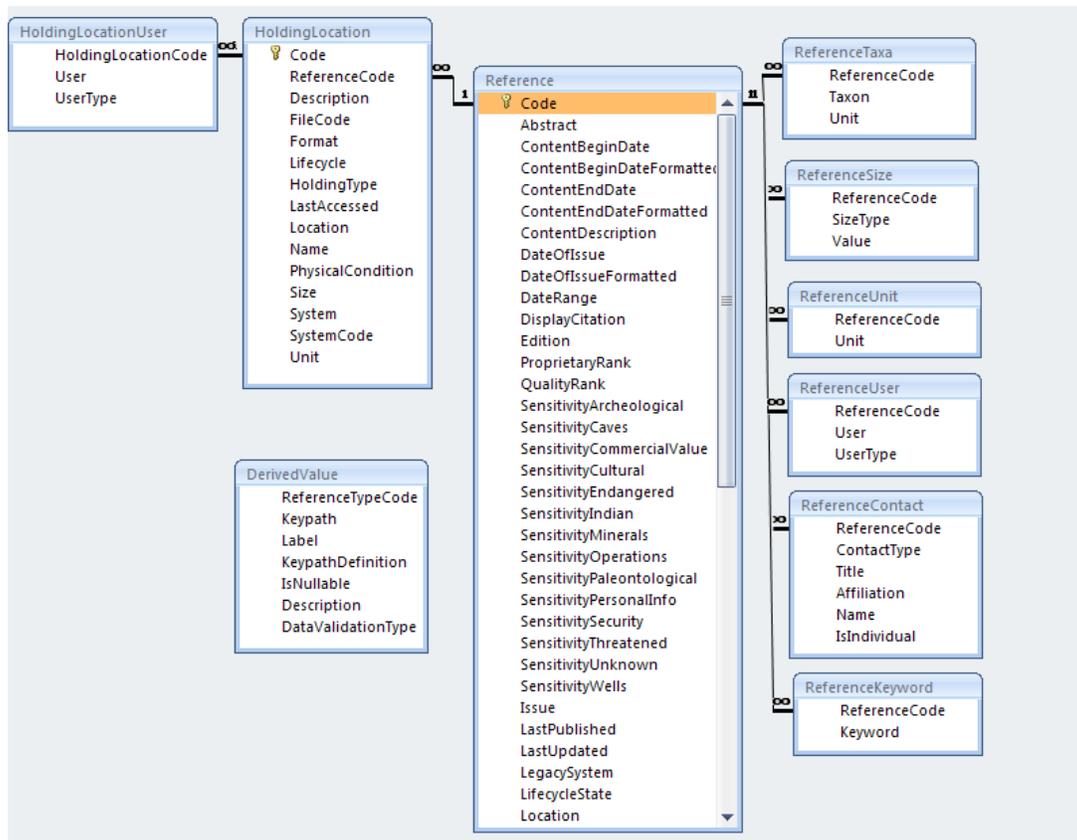


- Comma-Separated Values Text File (CSV) of References as Displayed in the Grid
- Excel spreadsheet (XLSX) of References as Displayed in the Grid
- Excel Spreadsheet (XLSX) of All References (up to 20,000) with Complete Data
- XML File to Import into MS Access of All References (up to 20,000) with Complete Data

The comma-separated file and the spreadsheet of References displayed in the grid has the least amount of information. The spreadsheet for up to 20,000 References contains more fields. By far, the most data rich and flexible option is to export to MS Access. If you do this (assuming you do know how to basically use MS Access), save the XML record locally, create a new MS Access file, and import an XML file.



You will create a number of tables, most of which can be joined together using the Database Tools→Relationships option in Access.



18.2 Endnote Export

There are two other ways you can currently export References to Endnote. First, you have the ability to connect directly to the database and optionally export to EndNote (Section 19).

Another option is to run one of the following EndNote export options from this sharepoint site:

<http://inp2300fcvalcab/Reports/Pages/Folder.aspx?ItemPath=%2fReference+Application+Metrics&ViewMode=Detail>

From this page you will see there are three options:

- EndNote Export by References I Own – Get a full export of all References you own
- EndNote Export By Unit – Export all References linked a NPS unit
- EndNote Export By Unit Holdings – Export all References where a physical holding location is located at a NPS unit.

SQL Server Reporting Services
 Home >
Reference Application Metrics

Contents Properties

Delete Move Report Builder

Edit	Type	Name
		EndNote Export By References I Own
		EndNote Export By Unit
		EndNote Export by Unit Holdings
		Files Uploaded
		InventoryTracking
		Number of References Created by Each User
		References Created
		Unknown Owners by Count of References owned
		Unknown owners by reference id

Once you run the search, save the results locally as CSV and then import into EndNote (Section 20).

1 of 2 ? 100% Find | Next

EndNote Export References I Own

EndNote Export

%0 Unpublished Work%T Reference Application Functional Roadmap%A National Park Service,%T Reference Application Functional Roadmap%Y %I %I %V %7 % P %8 06 Aug 2009%D 2009%X The Reference Application is the NPS Natural Resource Program Center's system for managing references to documents, datasets, media, and collections relevant to managing the National Parks' natural resources. The Reference Application replaces the core functionalities of the NPS Data Store and NatureRih; therefore, the scope of the Reference Application is

- XML file with report data
- CSV (comma delimited)**
- PDF
- MHTML (web archive)
- Excel
- TIFF file
- Word

19 Direct Database Connectivity

For power users, another option you have for directly accessing information from the Data Store is to connect directly to a replicate version of Reference using ODBC connectivity. Direct access gives you full flexibility in how you search for, analyze and present information.

Please be aware of the following when using the database:

- The database is a replicate of the version in production, which is synchronized almost instantaneously.
- All References and Holding Locations with a visibility of Restricted have been removed from the replicate database.
- The URLs for all digital files are shown, regardless of whether you have permission to access the file. When clicking on the URL, the Data Store will determine whether you should be granted access to the file. Therefore, identity is fully managed when attempting to download files.
- Because you have full access to Internal References and Holding Locations, you should **never** disclose this information to public users without first gaining permission from the respective Reference Owners.
- Please informally register with Brent Frakes (brent_frakes@nps.gov) to let him/us know that you are using ODBC connectivity. First, it helps us gauge who is using this. More importantly, if you don't, you run the risk of having us change things which could break your application. We'll be sure to coordinate with any registered user prior to any changes. Finally, we want your feedback for further improvements.

19.1 Permissions

Because this is a new and experimental feature, you will need to request permission to access the database by contacting Brent Frakes (brent_frakes@nps.gov). By requesting permission, we will know who is connecting to the database and can more easily communicate should there be any changes in the connections and/or schema. Longer term, we hope to open this up more broadly and not require permission.

19.2 Connecting to the Database

To connect to the database, you will need to specify the following:

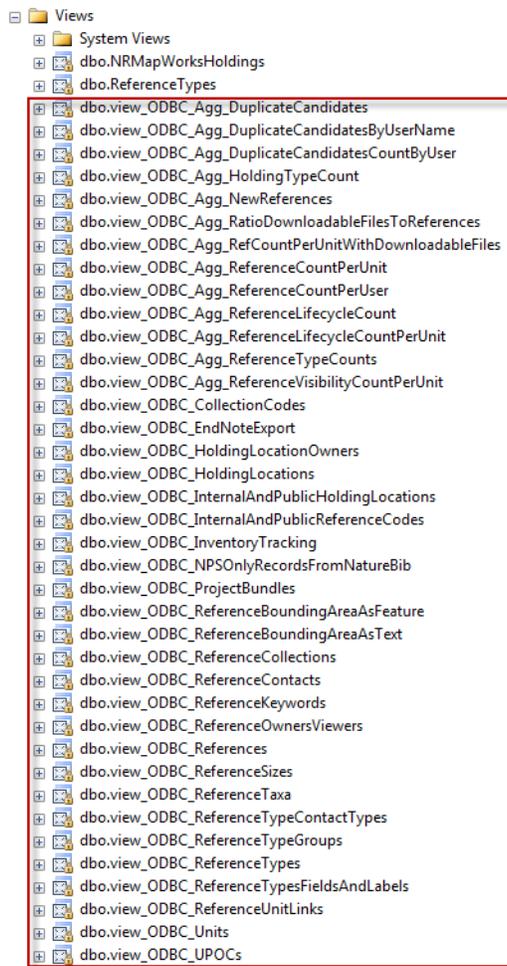
- Server Name: inp2300fcserver4\irmaitg
- Database Name: Reference_MIMA1_App_DB
- Authentication: Windows Authentication

General directions for connecting to any SQL-Server Database are found here in the following document:

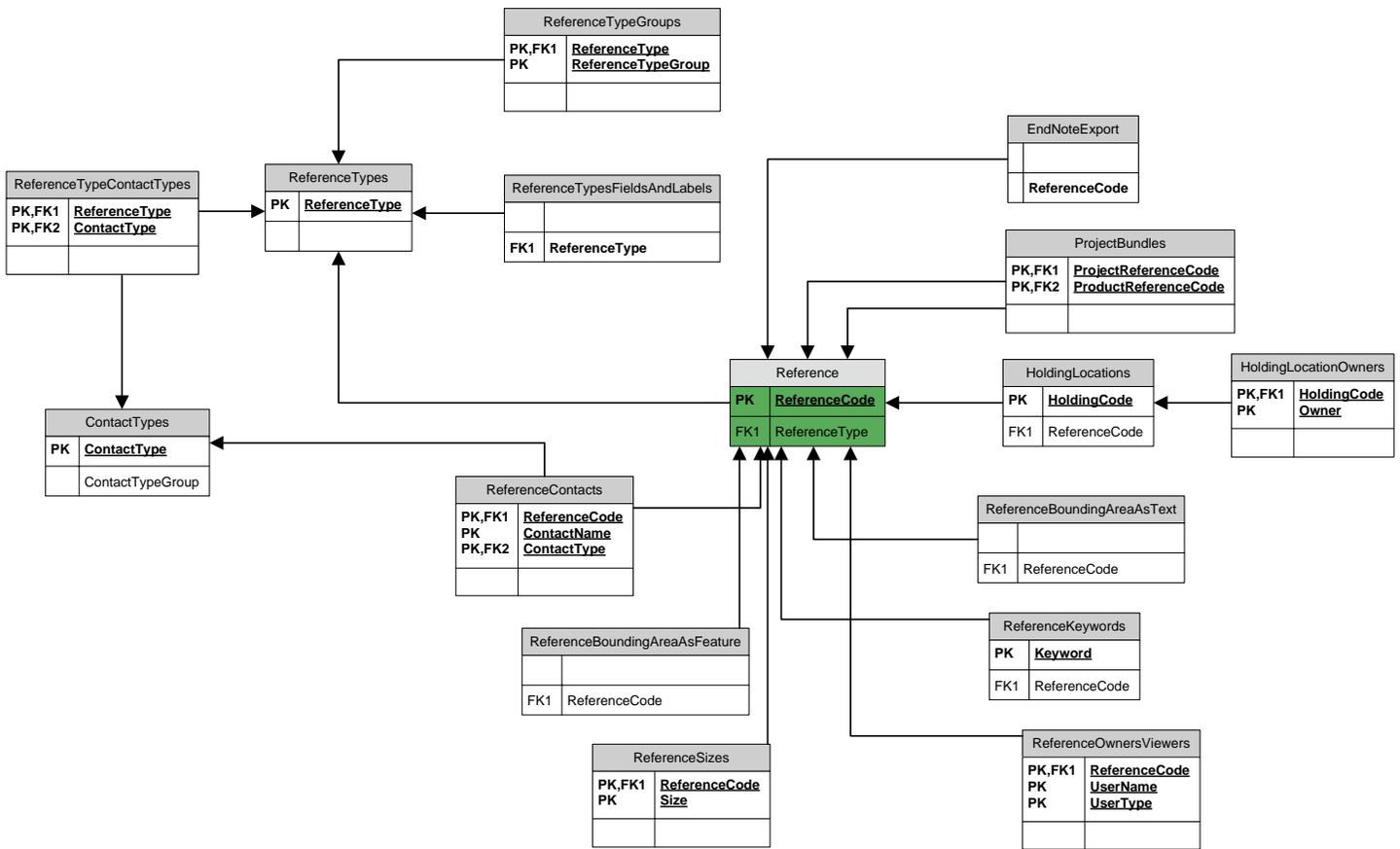
<https://nrinfo.nps.gov/Reference.mvc/Profile?Code=2171456>

19.3 Views

Behind the scenes, the tables in the Data Store are highly normalized and not very friendly to use. To make it easier on you, we have created a number of views (i.e., virtual tables) which de-normalize much of the information and make it much easier to work with.



The view you are most likely to use is view_ODBC_References. Almost all other view join to this one using the Reference Code. For example, if you want to see all Holding Locations for a Reference, you would join view_ODBC_References with view_ODBC_HoldingLocations.



In addition, we have created a number of aggregate views, which summarize information within the Data Store.

19.3.1 Basic Views

All basic views are prefixed with 'view_ODBC_' in their name to clarify that they are all part of the same group of views.

DuplicateCandidates

NOTE: THIS IS STILL IN PROGRESS AND NOT FINISHED

This view lists all of the Reference Codes where there is the probably chance of it being duplicative with another in the Data Store.

High Confidence Duplicates are those where the following criteria match:

Example:

```
SELECT TOP 1000 [CollectionId]
, [ReferenceCode]
FROM [dbo].[view_ODBC_CollectionCodes]
Where CollectionId = 2
```


CollectionCodes

This view lists all of the Reference Codes for a particular Reference Collection. You will need to link this view to the ReferenceCollections view.

Fields:

Field Name	Description
CollectionId	The unique ID of the Reference Collection
ReferenceCode	FK. The unique Reference Code

Example:

```
SELECT TOP 1000 [CollectionId]
, [ReferenceCode]
FROM [dbo].[view_ODBC_CollectionCodes]
Where CollectionId = 2
```

CollectionId	ReferenceCode
2	18906
2	18907
2	18917

EndNoteExport

This view transforms data from Reference into a format that can be imported into Endnote. Be aware that SSMSE can truncate information in its table view. Therefore, if you intend to use this view, we recommend using the desktop version of access (Section 19.4).

Fields:

Field Name	Description
EndNoteExport	Large blob of text intended to be imported into EndNote
ReferenceCode	FK.

Example:

```
SELECT TOP 2 [EndNoteExport]
, [ReferenceCode]
FROM [dbo].[view_ODBC_EndNoteExport]
```

EndNoteExport	ReferenceCode
%0 Remotely-Sensed Imagery %T Airphoto Mosaic for Little Bighorn NB %Y %l %V %7 %P %8 30 Jul 1954 %D 1954 %X Mosaic of airphotos acquired on July 30, 1954 %Z %> %U https://nriminfo.nps.gov/Reference.mvc/Profile?Code=1045462 // NRINFO ReferenceType = Aerial Photograph %K Airphoto %] %= LIBI	1045462
%0 Remotely-Sensed Imagery %T Airphoto Mosaic for North End of Little Bighorn NB - June 26, 1977 %Y %l %V %7 %P %8 26 Jun 1977 %D 1977 %X Mosaic of airphotos acquired on June 26, 1977. Covers the north side of the park. %Z %> %U https://nriminfo.nps.gov/Reference.mvc/Profile?Code=1045463 // NRINFO ReferenceType = Aerial Photograph %K Airphoto %] %= LIBI	1045463

HoldingLocationOwners

Table showing the Active Directory name of all Owners of a holding location.

Fields:

Field Name	Description
HoldingCode	FK. Unique ID of Holding Location
UserCode	FK. Unique User ID

Example:

```
SELECT Top 6 * FROM [view_ODBC_HoldingLocationOwners]
WHERE [UserCode] = 'bfrakes'
```

HoldingCode	UserCode
371400	BFrakes
372072	BFrakes
376037	BFrakes
376074	BFrakes
376075	BFrakes
376076	Bfrakes

HoldingLocations

Shows all Holding locations for a given Reference.

Fields:

Field Name	Description
ReferenceCode	
HoldingCode	
HoldingLocationVisibility	
Description	
Format	
HoldingLifecycleState	
HoldingType	
LastAccessed	
Location	
Name	
Size	
System	
SystemCode	
UnitCode	
DigitalFilePath	
FileDownloadability	
ReferenceDisplayCitation	

Example

```
SELECT ReferenceCode, HoldingCode, Description, FileDownloadability
FROM [view_ODBC_HoldingLocations]
WHERE ReferenceCode = 2167254
```

Reference Code	HoldingCode	Description	FileDownloadability
2167254	423778	Original R Scripts from NPCLime	Public

2167254	423811	Project overview, including goals, risks and benefits	Public
---------	--------	---	--------

InternalAndPublicHoldingLocations

This view shows a list of all Holding Locations with a visibility of Internal or Public. There is really no need to use this view, but it is utilized by a number of other views internally.

Fields:

Field Name	Description
HoldingCode	
HoldingLocationVisibility	
ReferenceCode	
ReferenceVisibility	
ReferenceDisplayCitation	
HoldingLifecycleState	
HoldingType	

InternalAndPublicReferenceCodes

This view shows a list of all References with a visibility of Internal or Public. There is really no need to use this view, but it is utilized by a number of other views internally.

Fields:

Field Name	Description
InternalReferenceId	Ignore this field completely. It is used internally for joining tables.
ReferenceCode	
ReferenceVisibility	
VisibilityCode	
LifecycleState	
LegacySystem	
ReferenceDisplayCitation	

InventoryTracking

This table summarizes the status of each of the I&M Inventories.

Fields:

Field Name	Description
------------	-------------

Id	
ReferenceCode	
InventoryCode	
Inventory	
Title	
InventoryStatus	
Unit	
BeginYear	
EndYear	
NRInfoURL	
Visibility	

Example:

```
SELECT TOP 1000 [ReferenceCode]
      ,[Title]
      ,[InventoryStatus]
      ,[UNIT]
FROM [view_ODBC_InventoryTracking]
WHERE UNIT = 'ABLI'
```

ReferenceCode	Title	InventoryStatus	UNIT
1048810	National Park Service - SRI - Soil Survey Geographic (SSURGO) for Abraham Lincoln Birthplace National Historic Site, Kentucky	Completed	ABLI

NPSOnlyRecordsFromNatureBib

This table provides a list of Reference Codes that currently have a visibility of Restricted because they were flagged as being sensitive in NatureBib.

Please note that these References are not present in view_ODBC_References. If you own any of the References, using the Data Store through the NRInfo Portal, search by Holding Location and then any sensitive information from the Reference. Be sure to indicate whether the information resource contain sensitive and/or proprietary information.

Fields:

Field Name	Description
ReferenceCode	
ReferenceLifecycle	
ReferenceOwner	

Example:

```
SELECT * FROM [view_ODBC_NPSOnlyRecordsFromNatureBib]
```

WHERE ReferenceOwner = 'pflaherty'

ReferenceCode	ReferenceLifecycle	ReferenceOwner
609	Legacy	PFlaherty
8880	Legacy	PFlaherty
8931	Legacy	PFlaherty
11222	Legacy	PFlaherty
11954	Legacy	PFlaherty

ProjectBundles

Lists all References bundled with a project.

Fields:

Field Name	Description
ProjectReferenceCode	
ProductReferenceCode	

Example:

```
SELECT [ProjectReferenceCode]
      , [ProductReferenceCode]
FROM [view_ODBC_ProjectBundles]
WHERE ProjectReferenceCode = 2097668
```

ProjectReferenceCode	ProductReferenceCode
2097668	3434
2097668	3530
2097668	3612
2097668	3805
2097668	3911
2097668	4002
2097668	4108
2097668	4182

ReferenceBoundingAreaAsFeature

This provides the feature for the bounding area polygons. Unfortunately, ArcGIS will have trouble reading this.

Fields:

Field Name	Description
ReferenceCode	
Name	
Feature	

Example:

ReferenceCode	Name	Feature
2124963	From Metadata	0xE61440..... [Binary stuff not worth repeating]
2124964	DEVA Default Bounding Rectangle	0xE61000..... [Binary stuff not worth repeating]

ReferenceBoundingAreaAsText

Provides the bounding area a series of points. Admittedly, it isn't the most friendly view at this time. Please provide feedback on how you would like this view to be structured.

Fields:

Field Name	Description
ReferenceCode	
LowerLeftVertex	
LowerRightVertex	
UpperRightVertex	
UpperLeftVertex	

Example:

```
SELECT TOP 2 *
FROM view_ODBC_ReferenceBoundingAreaAsText
```

ReferenceCode	LowerLeftVertex	LowerRightVertex	UpperRightVertex	UpperLeftVertex
101	POINT (-106.4796600599999 32.656216623599619)	POINT (-106.13686885899995 32.656216623599619)	POINT (-106.13686885899995 32.873164663185186)	POINT (-106.4796600599999 32.873164663185186)
102	POINT (-106.4796600599999 32.656216623599619)	POINT (-106.13686885899995 32.656216623599619)	POINT (-106.13686885899995 32.873164663185186)	POINT (-106.4796600599999 32.873164663185186)

ReferenceCollections

List all of Reference Collections.

Fields:

Field Name	Description
CollectionId	PK. Unique Reference Collection ID
Name	Name of the Reference Collection
UserCode	Owner of the Reference Collection
ReferenceCount	The total number of References within a Collection

Example:

```
SELECT TOP 5 [CollectionId]
, [Name]
, [UserCode]
, [ReferenceCount]
FROM [view_ODBC_ReferenceCollections]
ORDER BY ReferenceCount DESC
```

CollectionId	Name	UserCode	ReferenceCount
9	NPScape - All Records	LNelson@nps.gov	461
23	Hydrographic and Impairment Statistics Data	LNelson@nps.gov	381
17	Soil Resource Inventory Projects	LNelson@nps.gov	224
43	PIRO Vascular Plants	dloope@nps.gov	185
4	NCPN_Springs_Literature_2003	hthomas@nps.gov	176

ReferenceContacts

List all of the contacts for a Reference, including authors, editors and publishers.

Fields:

Field Name	Description
ReferenceCode	
ContactType	
FirstName	
MiddleName	
LastName	
Suffix	

CorporateName	
IsIndividual	
DisplayOrder	

Example:

```
SELECT ReferenceCode, FirstName, LastName, DisplayOrder, ContactType
FROM view_ODBC_ReferenceContacts
WHERE ReferenceCode = 2167254
ORDER BY ContactType, DisplayOrder
```

ReferenceCode	FirstName	LastName	DisplayOrder	ContactType
2167254	Lisa	Nelson	1	Contributor
2167254	Simon	Kingston	2	Contributor
2167254	Brent	Frakes	3	Contributor
2167254	Peter	Budde	1	Lead

ReferenceKeywords

Lists all keywords for a given Reference.

Fields:

Field Name	Description
ReferenceCode	
Keyword	

Example:

```
SELECT ReferenceCode
, Keyword
FROM view_ODBC_ReferenceKeywords
WHERE ReferenceCode = 101
ORDER BY Keyword
```

ReferenceCode	Keyword
101	Animal Studies
101	Beetles
101	Coleoptera
101	holarctic ant
101	Lasius xerophilus

ReferenceOwnersViewers

Lists the Active Directory names for the Owners and Viewers for a given Reference.

Fields:

Field Name	Description
ReferenceCode	
UserCode	
UserType	

Example:

```
SELECT ReferenceCode
       ,UserType
FROM view_ODBC_ReferenceOwnersViewers
WHERE UserCode = 'bfrakes'
```

ReferenceCode	UserType
662372	Owner
664440	Owner
2124276	Owner
2124394	Owner
2124470	Owner
2124471	Owner
2124472	Owner
2124487	Owner

References

This is the main table that has the meat of the Reference attributes.

Fields:

Field Name	Description
ReferenceCode	
ReferenceVisibility	
ReferenceType	
AbstractText	
ContentBeginDate	
ContentBeginDateText	
ContentEndDate	
ContentEndDateText	
ContentDescription	
DateOfIssueText	
DateOfIssue	

DateRange	
DisplayCitation	
Edition	
InfoResourceProprietaryRank	
InfoResourceQualityRank	
InfoResourceSensitivityArcheological	
InfoResourceSensitivityCaves	
InfoResourceSensitivityCommercialValue	
InfoResourceSensitivityCultural	
InfoResourceSensitivityEndangered	
InfoResourceSensitivityMinerals	
InfoResourceSensitivityOperations	
InfoResourceSensitivityPaleontological	
InfoResourceSensitivityPersonalInfo	
InfoResourceSensitivityThreatened	
InfoResourceSensitivityUnknown	
InfoResourceSensitivityWells	
InfoResourceSensitivityIndian	
InfoResourceSensitivitySecurity	
Issue	
LastUpdated	
LegacySystem	
LifecycleState	
Location	
MeetingPlace	
MiscellaneousCode	
Notes	
PageRange	
Purpose	
TableOfContents	
Title	
UpdateFrequency	
Version	
Volume	
UseConstraints	
ParentReferenceCode	
ParentTitle	
ParentVolume	
ParentDateOfIssue	
ParentDateOfIssueText	
GrandparentReferenceCode	
GrandparentTitle	
ParentIssue	
ParentLocation	

NRInfoURL	
-----------	--

Example:

```
SELECT *
FROM view_ODBC_References
WHERE Title Like '%grizzly%'
```

Or you can join the table with others. For example, to search for all References where a keyword contains the phrase grizzly, set up your query this way:

```
SELECT DISTINCT r.ReferenceCode, r.Title
FROM view_ODBC_References r
INNER JOIN view_ODBC_ReferenceKeywords rk ON r.ReferenceCode = rk.ReferenceCode
WHERE rk.Keyword Like '%grizzly%'
```

ReferenceSizes

Lists all sizes for a given Reference, including number of pages, physical size, pixel resolution, etc.

Fields:

Field Name	Description
ReferenceCode	
Label	
Units	
Value	

Example:

```
SELECT *
FROM [view_ODBC_ReferenceSizes]
WHERE ReferenceCode = 112
```

ReferenceCode	Label	Units	Value
112	Size	Pages	3

ReferenceTaxa

Lists all taxa codes linked to a Reference.

Fields:

Field Name	Description
ReferenceCode	
TaxaId	
UnitCode	

Example:

```
SELECT ReferenceCode
      ,TaxaId
      ,UnitCode
FROM view_ODBC_ReferenceTaxa
Where ReferenceCode = 275
```

ReferenceCode	TaxaId	UnitCode
275	8032	ACAD
275	8063	ACAD
275	8071	ACAD
275	8084	ACAD
275	8625	ACAD

ReferenceTypeContactTypes

This table shows the valid contact types for a given Reference Type.

Fields:

Field Name	Description
ReferenceType	
ContactType	
IsRequired	

Example:

```
SELECT TOP 1000 ReferenceType
      ,ContactType
      ,IsRequired
FROM view_ODBC_ReferenceTypeContactTypes
WHERE ReferenceType = 'Aerial Photograph'
Order By ReferenceType
```

ReferenceType	ContactType	IsRequired
Aerial Photograph	Publisher	No
Aerial Photograph	Steward	No

Aerial Photograph	Originator	No
Aerial Photograph	Author	No

ReferenceTypeGroups

This shows how each Reference Type crosswalks to the broader Reference Type Groups.

Fields:

Field Name	Description
ReferenceType	
ReferenceTypeGroup	

Example:

```
SELECT TOP 6 [ReferenceType]
      ,[ReferenceTypeGroup]
FROM [view_ODBC_ReferenceTypeGroups]
WHERE ReferenceTypeGroup = 'Datasets'
ORDER By ReferenceType
```

ReferenceType	ReferenceTypeGroup
Aerial Photograph	Datasets
Audio Recording	Datasets
Generic Dataset	Datasets
Geodatabase	Datasets
Geospatial Dataset	Datasets
LIDAR Image	Datasets

ReferenceTypes

List all Reference Types in the database as well as a description.

Fields:

Field Name	Description
ReferenceType	
Description	

Example:

```
SELECT TOP 5 *
```

FROM [view_ODBC_ReferenceTypes]

ReferenceType	Description
Aerial Photograph	Photographs taken off the ground from an elevated position where the camera is not supported by a ground-based structure. The most common platforms for aerial photography include fixed-wing aircraft.
Audio Recording	An electrical or mechanical inscription and re-creation of sound waves, such as spoken voice or the ambient environment. The two main classes of sound recording technology are analog recording and digital recording.
Book	A set or collection of written, printed, illustrated, or blank sheets, made of paper, parchment, or other material, usually fastened together by a hinge at one side.
Book Chapter	One of the main divisions of a book. Chapters are generally numbered or titled.
Brochure	An unbound booklet (that is, without a hard cover or binding), often consisting of a single sheet of paper that is printed on both sides and folded in half, in thirds, or in fourths (called a leaflet). It may also consist of a few pages that are folded in half and stapled at the crease to make a simple book.

ReferenceTypesFieldsAndLabels

This tables shows the valid fields and respective labels for each Reference Type.

Fields:

Field Name	Description
ReferenceType	
DatabaseField	
DatabaseFieldLabel	
IsRequired	
PrimaryViewOrder	

Example:

```
SELECT *
FROM [view_ODBC_ReferenceTypesFieldsAndLabels]
WHERE ReferenceType = 'Aerial Photograph'
Order By PrimaryViewOrder
```

ReferenceType	DatabaseField	DatabaseFieldLabel	IsRequired	PrimaryViewOrder
Aerial Photograph	Title	Airphoto Title	Yes	1
Aerial Photograph	ContentDescription	Airphoto Brief Description	No	2
Aerial Photograph	ContentBeginDate	Airphoto Content Begin Date	No	3
Aerial Photograph	ContentEndDate	Airphoto Content End Date	No	4

Aerial Photograph	MiscellaneousCode	Airphoto Generic Code	No	5
Aerial Photograph	AbstractText	Airphoto Full Description	No	6
Aerial Photograph	Purpose	Airphoto Purpose	No	7
Aerial Photograph	Notes	Airphoto Notes	No	8

Reference Unit Links

Shows which References a linked to the respective NPS Unit.

Fields:

Field Name	Description
ReferenceCode	
Unit	
UnitLinkLifecycle	

Example:

```
SELECT TOP 5 [ReferenceCode]
, [UNIT]
, [UnitLinkLifecycle]
FROM [view_ODBC_ReferenceUnitLinks]
WHERE UNIT = 'ROMO' AND UnitLinkLifecycle = 'Pending'
ORDER BY ReferenceCode DESC
```

ReferenceCode	UNIT	UnitLinkLifecycle
2171906	ROMO	Pending
2171893	ROMO	Pending
2171418	ROMO	Pending
2169828	ROMO	Pending
2169461	ROMO	Pending

Units

List of all NPS Units

Fields:

Field Name	Description
UnitCode	

Example:

```
SELECT TOP 5 [UnitCode]
FROM [view_ODBC_Units]
```

UnitCode
ABLI
ACAD
ADADMIN
ADAM
ADCR

UPOCs

Provides the Active Directory names of all UPOCs for their respective Units.

Fields:

Field Name	Description
UnitCode	
UPOC	

Example:

```
SELECT *
FROM [view_ODBC_UPOCs]
WHERE UnitCode = 'ACAD'
```

UnitCode	UPOC
ACAD	akozlowski
ACAD	ESharron
ACAD	KBAnderson
ACAD	WGawley

19.3.2 Aggregate Views

Aggregate views are summarize the information within the Data Store. These views are intended more for administrative purposes although you are free to use them as conversation starters/enders. All aggregate views are prefixed with view_ODBC_Agg_.

 HoldingTypeCount

Summarizes the count of each holding type.

Fields:

Field	Description
HoldingType	One of four holding types
HoldingCount	The number of holdings for that type

Example:

```
SELECT *
FROM [view_ODBC_Agg_HoldingTypeCount]
```

HoldingType	HoldingCount
ExternalResource	64391
Physical	189215
CrossReference	143395
DigitalFile	12619

NewReferences

Shows up to the most recent 1000 References added.

Fields:

Field Name	Description
DisplayCitation	
LastUpdated	
ReferenceCode	
ReferenceVisibility	
LifecycleState	

Example

```
SELECT TOP 6 *
FROM [view_ODBC_Agg_NewReferences]
```

DisplayCitation	LastUpdated	ReferenceCode	ReferenceVisibility	LifecycleState
Water Resource Division, National Park Service Dean Tucker. 2009. Hydrographic and Impairment Statistics	2011-02-01 07:28:00	2167765	Internal	InReview

Database. Geospatial Dataset-2167765.				
[No Producer]. [No Date]. ALAG 321 TM mosaic. Generic Dataset-2167764.	2011-01-31 14:44:00	2167764	Public	Active
Jones M. 2008. test journal article kad. Conservation Biology. 22(5): [No Page Range]. Journal Article-2167762.	2011-01-28 16:05:00	2167762	Internal	Active
Burch J, Meier T. 2009. Wolf Monitoring Protocol for Denali National Park and Preserve, Yukon-Charley Rivers National Preserve and Wrangell-st. Elias National Park and Preserve, Alaska. Protocol-2167760.	2011-01-27 17:38:00	2167760	Public	Active
Burch J, Meier T. 2009. Wolf Monitoring Protocol for Denali National Park and Preserve, Yukon-Charley Rivers National Preserve and Wrangell-st. Elias National Park and Preserve, Alaska. Protocol-2167759.	2011-01-27 17:37:00	2167759	Public	Active
Bureau of Economic Geology, The University of Texas at Austin. 1997. Sediment Characteristics, History, and Recent Transport, Laguna Madre, Texas. Unpublished Report-2167758.	2011-01-27 17:04:00	2167758	Internal	Active

RatioDownloadableFilesToReferences

This view provides two measures of how many files are available for download for a given unit. Ratio indicates the ratio of references with at least one downloadable file. Thus, a value of 1 indicates that every Reference has at least one downloadable file.

Weighted ratio is similar to the ratio but also considers the number of total references. Thus, a higher weighted ratio indicates that there are many References with at least one downloadable file.

Fields:

Field Name	Description
UnitCode	
Ratio	
WeightedRatio	

Example

```
SELECT TOP 5 *
FROM [view_ODBC_Agg_RatioDownloadableFilesToReferences]
ORDER BY WeightedScore DESC
```

UnitCode	Ratio	WeightedScore
IMD	1	199.07
PACN	0.68	23.8
GRD	0.86	22.57

NATR	0.77	18.29
GLCA	0.46	17.39

RefCountPerUnitWithDownloadableFiles

For each NPS Unit, counts the number of References with at least one downloadable file.

Fields:

Field Name	Description
UnitCode	
ReferenceCount	

```
SELECT TOP 5 *
[view_ODBC_Agg_RefCountPerUnitWithDownloadableFiles]
ORDER BY ReferenceCount DESC
```

UnitCode	ReferenceCount
IMD	39700
GLCA	1425
PACN	1231
YELL	1130
KATM	1044

ReferenceCountPerUnit

For each Unit, counts the total number of References whose information Resources contain information specifically about that unit (i.e., linked to the Unit).

Fields:

Field Name	Description
UnitCode	
ReferenceCount	

Example

```
SELECT TOP 5 *
FROM [view_ODBC_Agg_ReferenceCountPerUnit]
ORDER BY ReferenceCount DESC
```

UnitCode	ReferenceCount
IMD	39736
HAVO	13748
YELL	12803
WRST	8823
WRD	7389

ReferenceCountPerUser

For each User, counts the total number of References.

Fields:

Field Name	Description
UserCode	
ReferenceCount	

Example

```
SELECT TOP 10 [UserCode]
, [ReferenceCount]
FROM [Reference].[dbo].[view_ODBC_Agg_ReferenceCountPerUser]
ORDER BY ReferenceCount DESC
```

UserCode	ReferenceCount
KDratch@nps.gov	105155
PBudde@nps.gov	40899
KSherrill@nps.gov	40507
JDStark@nps.gov	39908
MStory@nps.gov	39819
SKingston@nps.gov	39690
SWorthington@nps.gov	39689

KKozar@nps.gov	19478
jkeefe@nps.gov	19094
CGuiles@nps.gov	12123

ReferenceLifecycleCount

Counts the number of References for each lifecycle state.

Fields:

Field Name	Description
LifecycleState	
ReferenceCount	

Example:

```
SELECT *
FROM [view_ODBC_Agg_ReferenceLifecycleCount]
```

LifecycleState	ReferenceCount
Active	46343
Legacy	366775
InReview	219

ReferenceLifecycleCountPerUnit

Summarizes, for each unit, the number of References in different lifecycle states.

Fields:

Field Name	Description
Unit	
LifecycleState	
ReferenceCount	

Example:

```
SELECT TOP 1000 [UNIT]
, [LifecycleState]
```

```

, [ReferenceCount]
FROM [view_ODBC_Agg_ReferenceLifecycleCountPerUnit]
WHERE UNIT = 'GLAC'

```

UNIT	LifecycleState	ReferenceCount
GLAC	Active	293
GLAC	Legacy	4406

ReferenceTypeCounts

Counts the number of References by Reference Type

Fields:

Field Name	Description
ReferenceType	
ReferenceTypeCount	

Example:

```

SELECT TOP 5 [ReferenceType]
, [ReferenceTypeCount]
FROM [view_ODBC_Agg_ReferenceTypeCounts]
ORDER BY ReferenceTypeCount DESC

```

ReferenceType	ReferenceTypeCount
Published Report	105788
Journal Issue	59912
Journal Article	58888
Aerial Photograph	39781
Geospatial Dataset	25400

Reference Visibility Count Per Unit

Counts the number of References, grouped by visibility, for a particular NPS Unit. This is an aggregate function and needs to be renamed.

Fields:

Field Name	Description
ReferenceVisibility	

Unit	
ReferenceCount	

Example:

```
SELECT TOP 5 [UNIT],[ReferenceVisibility], [ReferenceCount]
FROM [view_ODBC_Agg_ReferenceVisibilityCountPerUnit]
WHERE ReferenceVisibility = 'Public'
ORDER BY ReferenceCount DESC
```

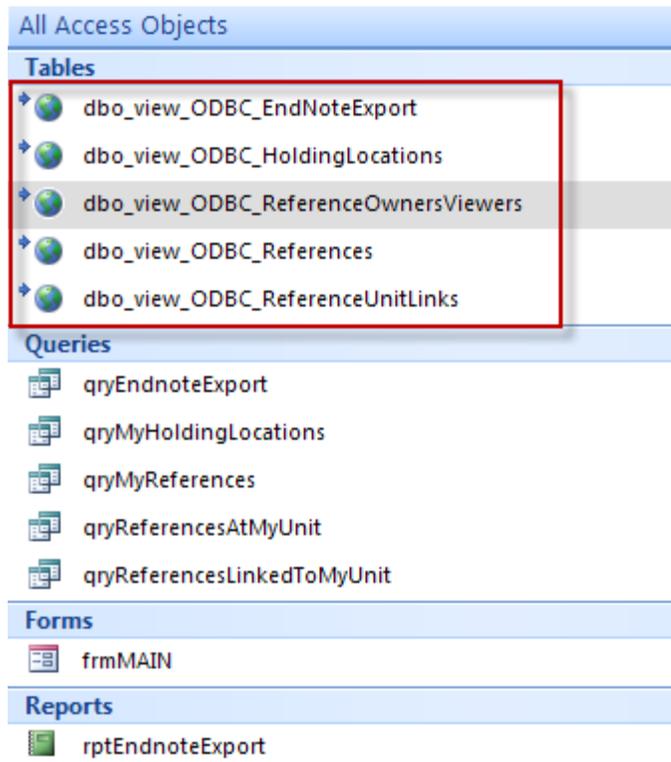
UNIT	ReferenceVisibility	ReferenceCount
IMD	Public	39728
ARD	Public	2071
GLCA	Public	1543
NRIM	Public	1393
APPA	Public	1138

19.4 Using the Desktop Viewer

A very simple desktop viewer is available here:

<http://nrpcsharepoint/irma/Reference%20Application%20Help/Forms/AllItems.aspx>

Once you have connected to the database, you should at least import the following tables as linked tables:



Of course, you can always import more tables if you want to customize your own queries and searches.

Once you have imported the tables, the following simple searches will work.

Reference Application Desktop Viewer

Version: 4/15/2010

My References

My Holding Locations

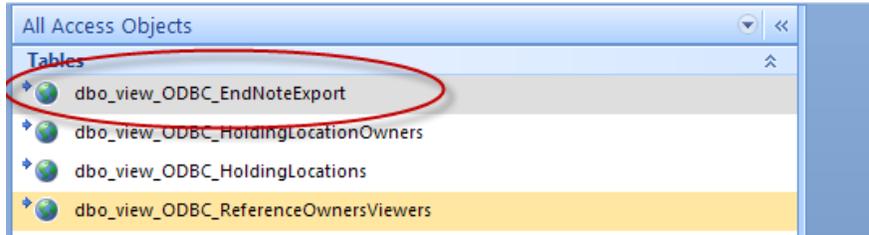
References Linked to My Unit

References Located at My Unit

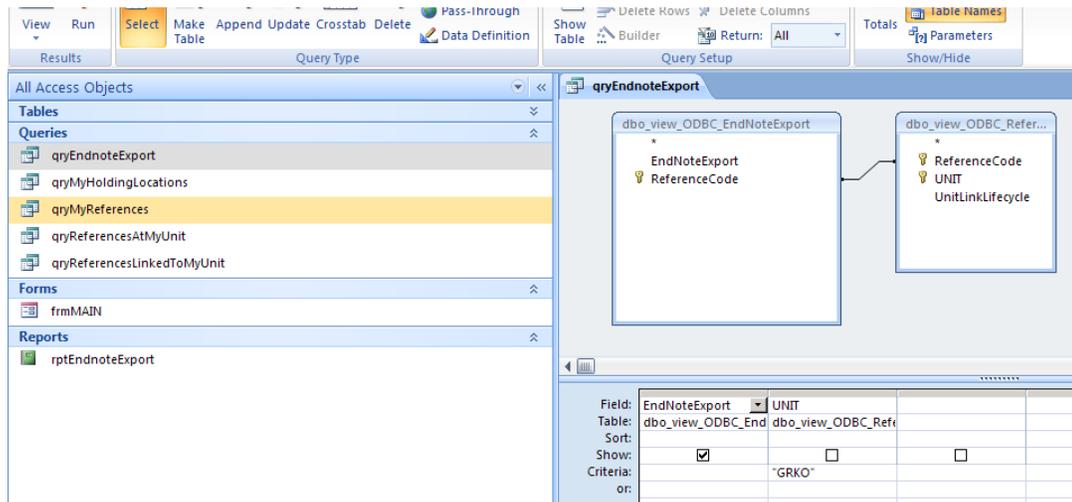
19.5 Exporting to EndNote

A view, view_ODBC_EndNoteExport, reformats data from Reference to a format that can be imported into Endnote. Working with the view directly is tricky because, unless you are careful, data will be truncated using SSMSE or Access queries. Therefore, we recommend the following steps:

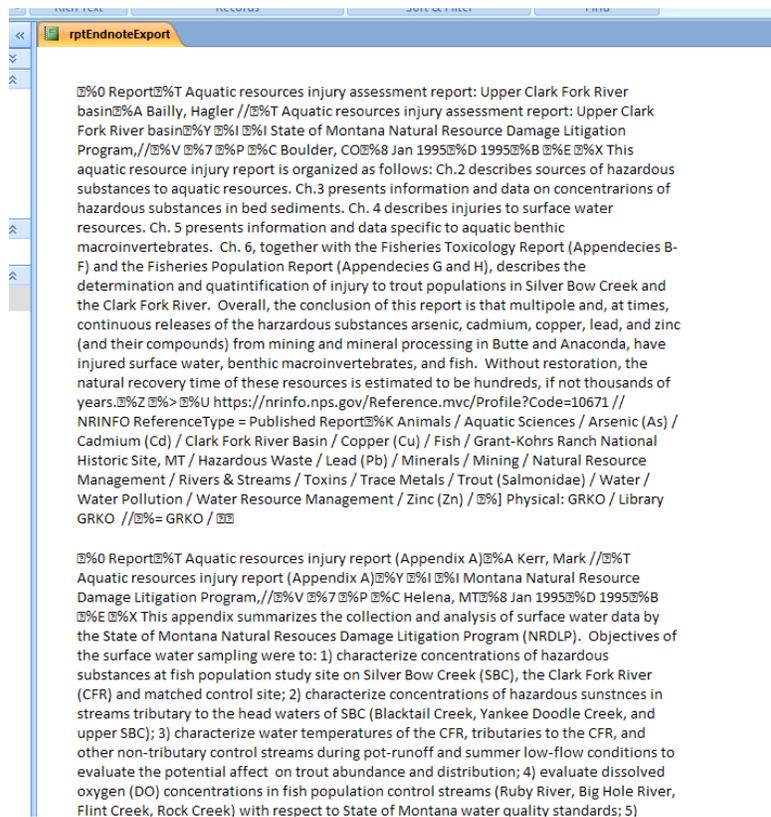
1. Download a copy of the front-end Reference Desktop Application (A copy of it is located in the [Reference Help Folder](#)).
2. Make sure you have a linked to the view view_ODBC_EndNoteExport and a couple of other tables to help refine your search (don't attempt to pull every record down)



3. Modify the query "qryEndnoteExport" to meet the criteria you want. The query should only return a single field titled "EndNoteExport". For example, in the following example, the export will return all records linked to GRKO.



4. Run the report titled "rptEndnoteExport"



5. Copy all of the text from the Report (ctrl-A, ctrl-C), paste in a text file (ctrl-V) and save as text. This has worked quite well using Notepad++.
6. Follow the Endnote import steps (Section 20).

20 Importing References into Endnote

20.1 Steps

This section provides instructions on how import References into Endnote. It is assumed that you have exported References to EndNote before doing this step.

First, obtain the following zip archive:

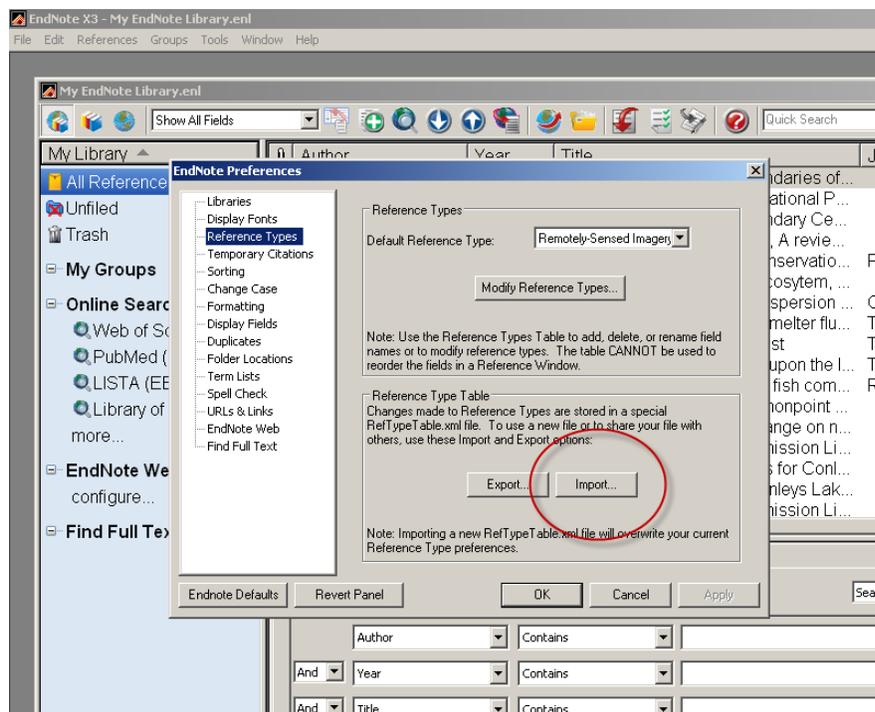
http://nrpcsharepoint/irma/Reference%20Application%20Help/EndNote_TemplateAndFilter.zip

and unzip the two files locally.

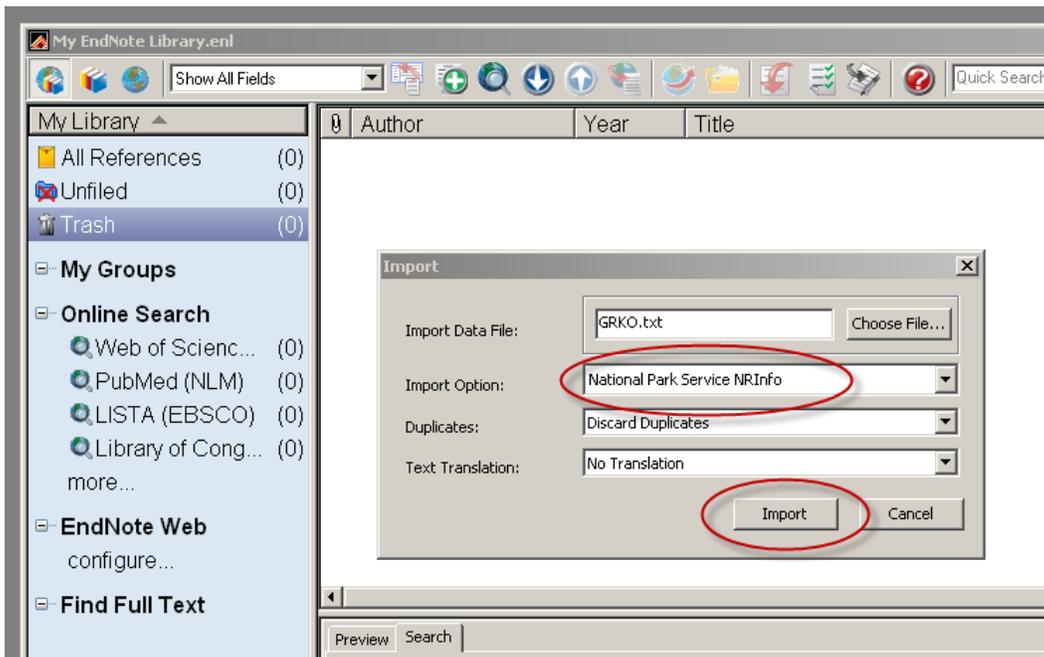
Second, move the import filter “National Park Service NRInfo.enf” to the Endnote filters folder on your local computer (typically this is something like C:\Program Files\EndNote X3\Filters).

Third, open Endnote.

Fourth, import the Endnote template “NRInfo Endnote Template.xml” (Edit-->Preferences-->Reference Types).



Finally, import (File-->Import) the text file using the “National Park Service NRInfo” filter.



Other points:

- Try to avoid importing more than 12,000 records at a time since it starts to overload Access and the Endnote import tool.
- If you do not use the provided filter, many of the Reference will be imported as 'Book' instead of their correct reference type.
- Over the short-term, we'll improve these steps to be more streamlined. In the next couple of releases, this should be possible to export directly from the NRInfo Portal.

20.2 Logic

As much as possible, we conform to the Endnote Reference types. Therefore, when exporting from Reference and importing into EndNote, we crosswalk the following NRInfo Reference types to the Endnote Reference Types:

NRInfo Reference Type	Endnote Reference Type	Notes
Generic Dataset	Aggregated Database	
Relational Database		
Tabular Dataset		
Book	Book	
Book Chapter	Book Section	
Conference Proceeding Paper	Conference Paper	
Conference Proceeding	Conference Proceeding	
Photograph	Figure	
Geodatabase	Geospatial Dataset	Makes use of one of the unused Reference Types in Endnote
Geospatial Dataset		
Raster Dataset		
Vector Dataset		
Journal Article	Journal Article	
Map	Map	

Newspaper Article	Newspaper Article	
Email	Personal Communication	
Letter		
Memorandum		
Project	Project	Makes use of one of the unused Reference Types in Endnote
Aerial Photograph	Remotely-Sensed Imagery	Makes use of one of the unused Reference Types in Endnote
Satellite Image		
Published Report	Report	
Dissertation	Thesis	
Thesis		
Unpublished Report	Unpublished Work	
All Other Reference Types	Generic	

For each Reference Type, we have made every attempt to follow EndNote's guidance on field mapping. In addition, we map the following:

- URL – The NRInfo URL for the Reference
- Custom 6 – The Reference Code as a single number
- Custom 7 – All Holding Locations for the Reference. This includes all digital and physical holding locations. Holding Locations are delimited with a '/
- Custom 8 - Units linked to the Reference. Unit codes are delimited with a '/' (e.g., ROMO / GRKO / GRSA).

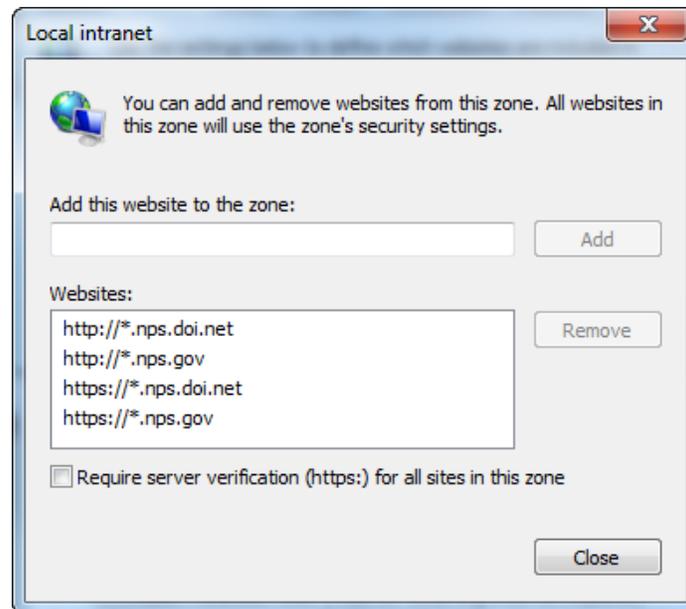
21 Errors and Troubleshooting

This section details any known bugs or other common issues.

21.1 I am Prompted for a Password While Accessing the Portal From an NPS Computer

This issue, which is common with Windows 7, has to do with your internet browser not being configured correctly by IT to accept NPS domains as trusted web sites. To fix this in Internet Explorer:

1. Tools -> Internet Options
2. Select 'Security' tab
3. Select 'Local intranet'
4. Click the 'Sites' button
5. On Local intranet dialog, click 'Advanced' button
6. Add these websites to the intranet zone:
 - http://*.nps.doi.net
 - http://*.nps.gov
 - https://*.nps.doi.net
 - https://*.nps.gov



These steps should be similar for Firefox and Chrome.

21.2 I Can't Upload a Holding or XML metadata record

To successfully upload a file, you will need to get the most recent version of Microsoft Silverlight. To make sure you have it installed, click on this url:

<http://www.microsoft.com/getsilverlight/Get-Started/Install/Default.aspx>

You should get a message similar to what is shown below:

Get Microsoft Silverlight



The version of Silverlight installed is:
Silverlight 4 (4.0.60310.0)

You are ready to use Microsoft Silverlight

[Installation Instructions](#)

[System Requirements](#)

[Uninstall Silverlight](#)

1. Verify your system requirements

Make sure you are running a **Silverlight-compatible** Windows operating system and browser and that you have uninstalled any previous version of Silverlight.

2. Download Silverlight

If your version of Silverlight is out-of-date, please upgrade.

If you do not have Silverlight, please install it.

Also confirm that you are not using the 64-bit version of Internet Explorer – the 64-bit version does not support Silverlight². To confirm, click on the help option for Internet Explorer and make sure you do not see the following:



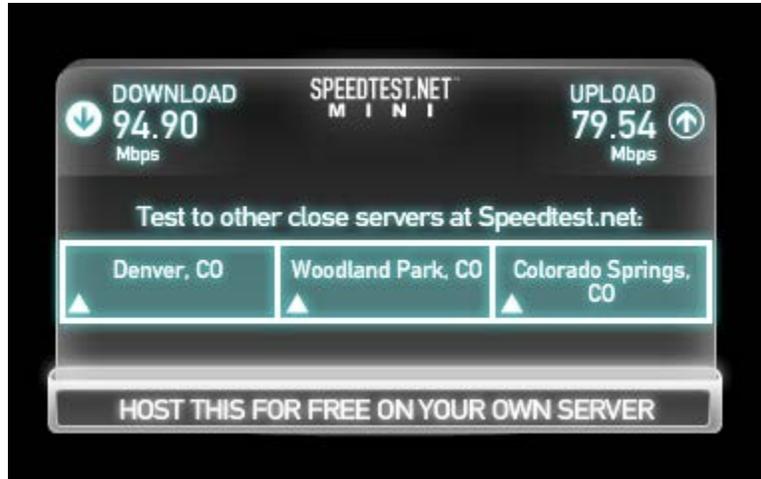
Otherwise, if you continue to have problems, please contact us.

² As to why IE doesn't support another Microsoft product is beyond the scope of this Help Manual

21.3 Screens Take a Long Time to Open/Everything is Really Slow/Downloads Timeout/

Run the following speedtest in Internet Explorer:

<http://inp2300fcmoto1/speedtest/>

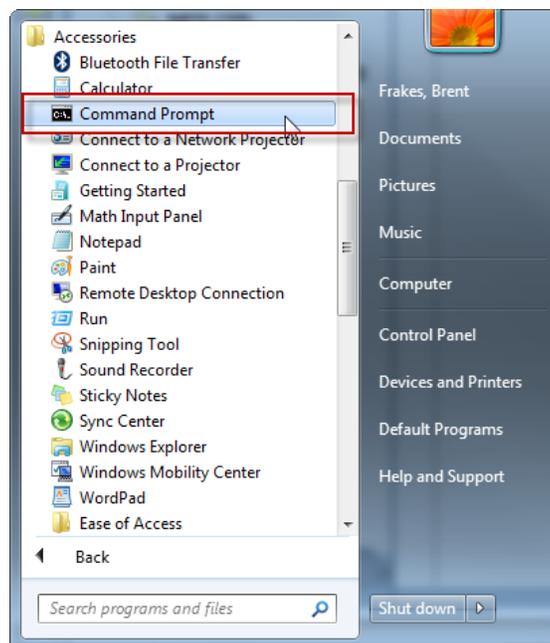


Run three times and take the average of both the upload and download speeds. Write those in a text file and send it in an email to NRinfo_Feedback@nps.gov along with a brief description of your problems.

Note: If you are getting anything less than .085 Mbps the portal will not even be functional.

21.4 Can't Login or Get Connected

Go To Start→All Programs→Accessories→Command Prompt



Type in the following

```
ipconfig /all →[Return]
tracert nrinfo.nps.gov →[Return]
systeminfo → [return]
ping nrinfo.nps.gov →[Return]
ping pepc.nps.gov → [Return]
```

Select all text (right click on the command prompt panel), copy it, and paste the text in a text file

```

Command Prompt
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : 
Description . . . . . : Teredo Tunneling Pseudo-Interface
Physical Address. . . . . : 00-00-00-00-00-00-00-00
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Tunnel adapter isatap.{A7B5E4DC-1758-4B57-8AB5-AB495C04E3F5}:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : 
Description . . . . . : Microsoft ISATAP Adapter #1
Physical Address. . . . . : 00-00-00-00-00-00-00-00
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Tunnel adapter isatap.nps.doi.net:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . : nps.doi.net
Description . . . . . : Microsoft ISATAP Adapter #2
Physical Address. . . . . : 00-00-00-00-00-00-00-00
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
H:\>
H:\>tracert nrinfo.nps.gov
Tracing route to nrinfo.nps.gov [10.147.158.230]
over a maximum of 30 hops:
  0  0 ms  0 ms  0 ms  10.147.180.1
  1  11 ms  1 ms  1 ms  10.147.180.1
  2  <1 ms  <1 ms  <1 ms  nrinfo.nps.doi.net [10.147.158.230]
Trace complete.
H:\>ping nrinfo.nps.gov
Pinging nrinfo.nps.gov [10.147.158.230] with 32 bytes of data:
Reply from 10.147.158.230: bytes=32 time=10ms TTL=127
Reply from 10.147.158.230: bytes=32 time<1ms TTL=127
Reply from 10.147.158.230: bytes=32 time<1ms TTL=127
Reply from 10.147.158.230: bytes=32 time<1ms TTL=127
Ping statistics for 10.147.158.230:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms
H:\>

C:\Users\bfrakes\Desktop\configs.txt - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
configs.txt
114
115 Tunnel adapter isatap.nps.doi.net:
116
117 Media State . . . . . : Media disconnected
118 Connection-specific DNS Suffix . : nps.doi.net
119 Description . . . . . : Microsoft ISATAP Adapter
120 Physical Address. . . . . : 00-00-00-00-00-00-00-E0
121 DHCP Enabled. . . . . : No
122 Autoconfiguration Enabled . . . . : Yes
123
124 H:\>
125 H:\>tracert nrinfo.nps.gov
126
127 Tracing route to nrinfo.nps.gov [10.147.158.230]
128 over a maximum of 30 hops:
129
130  1  11 ms  1 ms  1 ms  10.147.180.1
131  2  <1 ms  <1 ms  <1 ms  nrinfo.nps.doi.net [10.147.158.230]
132
133 Trace complete.
134
135 H:\>ping nrinfo.nps.gov
136
137 Pinging nrinfo.nps.gov [10.147.158.230] with 32 bytes of data:
138 Reply from 10.147.158.230: bytes=32 time=10ms TTL=127
139 Reply from 10.147.158.230: bytes=32 time<1ms TTL=127
140 Reply from 10.147.158.230: bytes=32 time<1ms TTL=127
141 Reply from 10.147.158.230: bytes=32 time<1ms TTL=127
142
143 Ping statistics for 10.147.158.230:
144 Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
145 Approximate round trip times in milli-seconds:
146 Minimum = 0ms, Maximum = 10ms, Average = 2ms
147

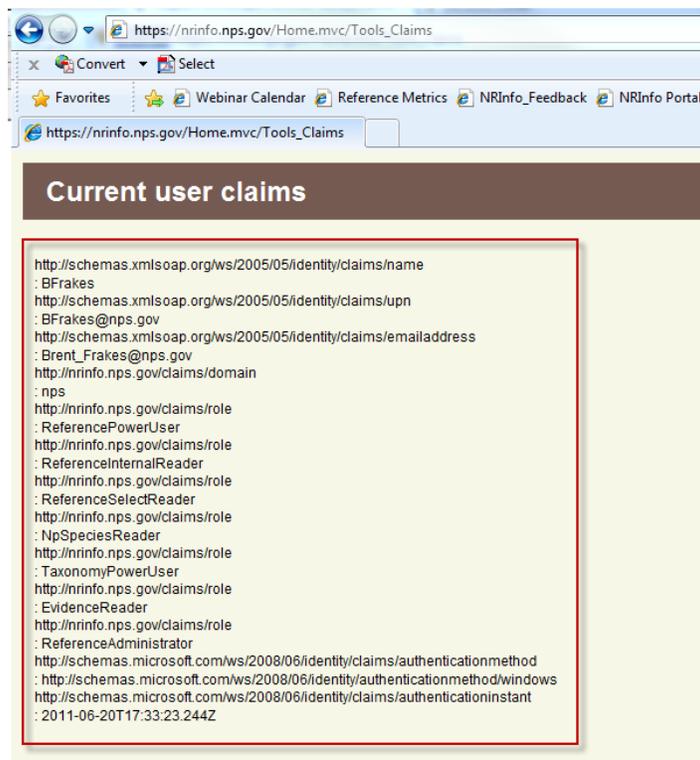
```

Once you have done this, send an email to NRinfo_Feedback@nps.gov along with a brief description of your problems and the attached configs.txt file.

21.5 I Don't Have Permission to Access Information I Know I Should Have Access To

Click on the following link:

https://irma.nps.gov/App/Portal/Home/Tools_Claims



Send an email to NRinfo_Feedback@nps.gov along with a brief description of your problems and the attached user claims.

21.6 NatureBib URLs Are Not Working Properly

We are, for the next year, supporting the NatureBib server to avoid breaking old links. However, the server may go down at times which would disrupt those links. Therefore, you should start updating these rules from your web pages and documents. Please see section 7.4 for more information.

21.7 I am Not Automatically Logged In/ My User Name is 'Guest'

While there may be a number of causes of this problem, we have had some success with the following:

- Be sure your wireless is turned off if you are using a cable
- If connecting by VPN, make sure it is Juniper VPN (not Cisco)
- Go to Start→Accessories→Command Prompt and type in 'ipconfig /flushdns' while you are connected to VPN

If you continue to have problems, please contact us.

22 Duplicate Detection and Resolution

There are a lot of duplicates records in the Data Store. During migration from the legacy systems, the Data Store inherited approximately 18,000 references which are almost certainly duplicative of each other (i.e., identical title, date of publication, and reference type). There are a number of issues which makes duplicate resolution problematic and not as straightforward you might initially think. Foremost, most of the duplicate References are owned by different individuals, each of who has modified their records differently.

We are currently exploring ways to detect and resolve duplicates.